The Journal of the American Medical Association

Published under the Auspices of the Board of Trustees

VOL. XLVIII. CHICAGO, ILLINOIS, JUNE 15, 1907. No. 24.

Addresses

THE DUALITY OF MAN.

CHAIRMAN'S ADDRESS IN THE SECTION ON OPHTHALMOLOGY AT THE FIFTY-EIGHTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION, ATLANTIC CITY, N. J., JUNE, 1907.

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In his address before the Medical Club of Philadelphia a short while ago Mr. Gilder, editor of the *Century*, urged "the establishment of an institute for the investigation of faith cure and other treatments not recognized by the medical profession." His suggestion should not be passed over lightly, for such things constitute a problem which should be solved, and that, too, by medical men. In all of these faith fads and fancies there is an element of truth which should be freed from the abominable errors that becloud it. If the solution is ever found it must come from the study of man as a dual creature, spirit and matter, spirit a unit, the material body a union. Life, not alone of man, but of the lower animals also, is the mystic union of spirit and matter. This mystic union we may never understand, nor can we ever know how the spirit of man differs from the spirit of the lower animals. As human intuition and intelligence are higher than animal instinct, so is the spirit of man more exalted than the spirit of the beast. The material parts of all the members of the animal kingdom are subject to disease and death. Whether the spirit of the lower animals can combat disease and delay death may be seriously doubted. That the spirit of man can help the organs of the body to fight disease and delay the oncoming of death must be conceded; and, on the contrary, the spirit in man, in some of its moods, may weaken the fight of the physical body against disease, and even hasten the hour of dissolution, the breaking of the mystic union between spirit and matter.

There is nothing further from the truth than that the only substance is spirit, unless it be the contrary statement that the only substance is matter. Without knowing the real essence of life, the union of spirit and matter, we may study its phenomena.

To have any correct understanding of the influence that the spirit has over the body we must study that one part of man, the nervous system, through which the spirit manifests its power. Since mind may be said to be the manifestation of spirit power through the nervous system, the terms mind and spirit will be used interchangeably. Through the nervous system the mind is in relationship with every part and organ of the body; and when the body is undisturbed by deformity, or by the germs of disease, and is not weakened by the wear of time, the mind, in some one of its faculties, controls perfectly, through the nervous system, the function of every organ. Hence, how all important is the study of the nervous system through which the mind works.

Prior to 1891 the study of the nervous system was by no means clear or satisfactory. In that year Waldeyer collected the recently accumulated evidence that the nervous system is a collection of units that are anatomically and physiologically independent. He named this unit the neurone. Later investigations by earnest and capable men, in many countries of the world, tend to establish the correctness of the neurone theory. But during all these years there have been some who have opposed Waldeyer's teachings; however, they are now few, as compared with the many who accept the neurone as an entity. Cajal has done more probably than any other man for the establishment of the neurone theory.

In the light of the investigations of His and Forel, made in the three fields of histology, embryology and pathology, it may be said that the nervous organism is composed, in part, of two systems of neurones, the afferent and the efferent. The neurone is defined as the central cell with its dendrites, the axone with its collateral branch, and the terminal organ or cell of the axone. Nervous energy has been named "neuricity" by Dr. G. W. Drake, of Hollin's Institute, Virginia, and a more appropriate term could not have been coined. Nervous energy so nearly resembles electricity, indeed, some claim that it is electricity—that the name neuricity must appear as most appropriate. Even if nervous energy is electricity it would be better to distinguish it, not by calling it "animal electricity," but by the shorter name neuricity.

It is certain that neuricity always runs from the peripheral end-organ to the central nerve cell of the afferent neurone, and from the central nerve cell to the peripheral end-organ of the efferent neurone.

Each neurone is a neuritic battery and corresponds, part for part, with the electric battery. The electric battery, in its simplest form, consists of a glass jar, whose length may be anywhere from a few inches to a few feet, and containing an acid liquid, in which are partly immersed, at one end, a plate of zinc, and at the other end a plate of carbon, a copper wire connecting the two exposed ends. The acid acting on the zinc generates heat, which is diffused throughout the liquid, passing from the zinc to the carbon; the carbon takes up the heat, transforms it into electricity and carries it to the copper wire, along which it travels to the zinc, by which it is probably transformed into heat. If the circuit is not complete the electric energy can not be made manifest.

In the generation and transmission of neuricity the containing vessel is the cuticular covering of the body, and its contents are the soft and hard structures of the body, all of which contain more or less water. The two ends of the neurone are entirely submerged, as is also the axone, but the latter is insulated. In the afferent

neurone the central cell corresponds to the zinc and the end-organ to the carbon, and the insulated nerve fiber corresponds to the copper wire. In such a neurone the neuricity must travel from the periphery to the center. In the efferent neurone the central cell corresponds to the carbon and the end-organ to the zinc, the insulated axone corresponding to the copper wire. In such a neurone the neuricity must travel from the center to the periphery. The structure and composition of the central cell and the end-organ determine the nature of the individual neurone; that is, they make it either an afferent or an efferent neurone.

It may never be known how neuricity is generated. The "carbon" end of the neurone may be endowed with power that enables it to take material from the blood that circulates around it, and by chemical action generate neuricity. It must also be endowed with power to store it, for neuricity travels along the axone only when a proper agent has acted on the generating-storing cell in such a way as to discharge it, or to set free its stored neuricity. The "zinc" end of the efferent neurone must be so endowed as to transform the received neuricity into power and heat—power to cause functional activity; while the "zinc" end of the afferent neurone transforms the received neuricity into heat and excites some faculty of the mind. If one end of a neurone is a generator the other end must be the receiver, while the axone simply transmits the neuricity.

The central end of a neurone is a protoplasmic cell consisting of a body and numerous dendrites. The cell body differs from its dendrites only in that it contains the nucleus with its nucleolus. There is found in the dendrite the same protoplasm as is found in the cell body. The dendrites exist, probably, only that the surface of the protoplasm may be enlarged many times—in some instances a hundredfold. The enlargement of surface enriches, to a corresponding extent, the blood supply around this small body of protoplasm. Whatever may be the function of the cell body, that must be the function of its dendrites. If the cell body is a generator of neuricity, its dendrites must do the same thing; if the cell body receives the neuricity, generated at the other end of the neurone, and transforms it into heat and awakens some faculty of the mind, its dendrites must be engaged in the same work. In no case, it would appear, is the dendrite a conductor of neuricity from the cell body to which it belongs to the dendrites of some other cell body, near or remote. The dendrites of two or more cells may intermingle, as the limbs of two or more trees in a forest intertwine; but no more does one cell body get anything from the other cell body because of this intermingling of dendrites, than does one tree get sap from another tree because of the intertwining of their branches. The neurone is conceded to be an independent unit, just as each tree of the forest is an independent unit.

Just how the axone begins in the cell body has not been set forth. Its beginning may have an important relationship with the nucleus of the cell body. It is certain that it consists of many fibers, and these fibers of fibrillæ. It is reasonable to suppose that all these fibers, except those composing the collateral branch, go without interruption from the cell in the brain to that part of the periphery in which they terminate in proper end-organs, as in a muscle; or some of these may go to an organ on one side of the body, while others from the same cell may go to the corresponding organ on the other side of the body.

Since the collateral branch of one axone does not unite with a collateral branch of another axone, and dendrites do not blend with dendrites, it can hardly be claimed that these branches and dendrites associate cells or centers in action, unless by contact. It would be interesting to know if all axones have collateral branches, or only those axones that help to form afferent neurones. The axones from the cells in the anterior part of the cord, helping to form the anterior roots, have no collateral branches; therefore, it is reasonable to conclude that all axones belonging to the efferent system are without collateral branches. If this is true, it would appear that the design of the collateral branch is to carry from the cell into the structure, in which the intracranial part of the neurone is imbedded, the heat which has resulted from the transformation of the neuricity by the cell power.

The length of an axone, some writers say, is from a few m.m. to half the length of the body, but no actual measurement can possibly be taken. The very function of an axone would seem to determine its length. This function is to conduct neuricity from the "carbon" end of the neuron to the "zinc" end; then it would appear that an axone simply covers the distance between the cell and the terminal organ, as from a sensitive point at the tip of the toe to a cell in the sensitive area of the cortex of the brain; as from a cell in the motor area of the cortex to a muscle that moves the toe; as from a retinal point to a cell in the cuneus. On its way from the cortical cell to the periphery, an efferent axone may pass through a cell or center at the base of the brain or in the spinal cord, but it is reasonable to suppose that it must be insulated there as elsewhere, so that there may be no dissipation of the neuricity which it may be conducting. From such a basal or spinal cell another axone goes with the former axone to the same structure or part of the body to help supply it with needed neuricity. Such an axone has an independent beginning ("carbon" end) and an independent termination ("zinc" end) from the one that has come from the cortex. In either case the neuricity is liberated or discharged by some faculty of the mind, one faculty controlling one cell and a very different faculty controlling the other cell. To illustrate: the right sixth cranial nerve is composed of axones from left cortical cells or center and axones from right basal cells or center. The axones from the cortex come from the left side of the brain and pass through a basal center (fourth) on the right side. In this basal center other axones have their origin, and these accompany the axones first mentioned to the right externus. If the eye is to be turned to the right, this must be accomplished through a volitional discharge of neuricity from the cortical cells, without any accompanying discharge from the basal cells, provided there is only the one eye; or if there are two eyes, provided they are well-balanced eyes. If there are two well-balanced eyes, and the object of fixation is straight ahead, and the head is in the primary position, there is no discharge of neuricity from either the cortical or basal cells; if the eyes are not well balanced, but esophoric, the position of the head and the point of view being as above, the right and left fourth basal centers are made to discharge enough neuricity to excite just enough contractility of the two externi to prevent the excessively strong interni from crossing the visual axes before the point of fixation is reached. This discharge of the basal centers is made in order to fuse the two images in the interest of binocu-

lar single vision, and the discharge may be said to have been effected by the fusion faculty of the mind. This action of the basal centers is not accompanied by excitation of the cortical centers which are under the control of the will. These cortical and basal centers, although they are both connected by the same nerve with the same muscle, must have independent axones, since they are capable of acting independently.

The greater number of both afferent and efferent neurones are unilateral in action. The neurones of ordinary sensation connect points on one side of the body with parts of the cortex on the opposite side of the brain; the neurones giving power to the muscles of the extremities begin in the cortex on one side of the brain and pass only to muscles on the opposite side of the body. The single organs—the heart, the stomach, and still others—probably have neuronic connection with both sides of the brain, and the same is probably true of every respiratory muscle.

The eye is the only double organ, parts of which have a common neuronic connection with only one side of the brain. That this may be, the axones divide, some fibrils going direct from one side of the brain to the corresponding eye, while the other fibrils cross and go to the opposite eye; or reversing the course, a point in one macula sends fibrils back through the optic nerve, and across the chiasm, to meet fibrils from a similar point in the macula of the other eye; these then go together as a single axone to the cuneus, to terminate in a single cell in the cortex. The impression made on cones in the one macula and the impression made on the cones in the other macula are conducted by the fibrils which later unite to form one axone, to one brain cell, and thus the two impressions excite a single sensation. This arrangement of visual axones readily accounts for corresponding retinal points and, therefore, for binocular single vision.

The brain cell in the cortex, whose discharge of neuricity calls into action two muscles, one belonging to each eye, accomplishes this work only because fibrils in its axone separate at a point in the base of the brain, some of them going to a muscle of the corresponding eye, while the others cross and finally reach a muscle of the opposite eye. Because of this distribution of the fibrils a discharging single cell sends its neuricity to two muscles, associating them in action, through the spirit power called volition.

The central cells of all the afferent and efferent neurones occupy only about one-third of the cortex. The remaining two-thirds of the cortex is occupied by cells that have no axones in the sense that they pass out of the cranial cavity to some remote organ. Histologists and physiologists teach that fibrils like those found in afferent and efferent axones leave these cells to go to some other part of the brain, near by or remote, calling them association fibers, but the existence of association fibers may be reasonably doubted. The non-sensory and non-motor areas of the brain, so much larger than the combined sensory and motor areas, have been called the silent areas for want of a better name. Of these there are at least three on each side of the brain, the anterior, the middle and the posterior. The middle area is the island of Reil, and this is separated from the anterior and posterior silent areas by a collection of special centers, as speech, hearing, smell, taste. The cells of these silent areas are used by the higher faculties of the mind, such as memory, imagination, reason, reflection and judgment, and the emotions—joy, sorrow, love, hate, hope, ambition. The action of the mental faculties on the cells of the silent areas depends, in some way or other, on excitation of afferent neurones. The mental processes thus generated are perfected by the activity of the cells in the silent areas, but can manifest their workings only through efferent neurones. The efferent neurones act on the mind and acquaint it with the physical world; the mind, in some one of its faculties, acts on the efferent neurones and through them acquaints the physical world with its powers. The stimulus of the afferent neurone is physical, as light, sound waves, heat and chemical and mechanical irritants; the stimulus of the efferent neurones—whether those that develop locomotion, excite secretion, control circulation and respiration, or produce speech—is the mind in some one of its many faculties. The mystery of the union between spirit (soul) and matter will remain a mystery, after the last word has been said about the structure and arrangement of the cerebrospinal axis. My object is not to explain the mystery of the dual nature of man, but to affirm it. Neither spirit nor matter can be defined, but the phenomena of both may be studied.

The neurone doctrine precludes the thought that the central cells of neurones have any direct connection. If the nervous organism is simply a self-acting machine there must be some sort of physical relationship between the central cells of the afferent and efferent systems, so that they may act and react on each other. This relationship is supposed to be by contact, but no one seems to be certain as to whether this contact is between dendrites or between collateral branches, and no one has been able to explain how this contact is brought about. Either direct connection or connection by contact is essential if there is any truth in the teaching that the afferent current of neuricity is conveyed from the "zinc" end of that neurone to the "carbon" end of an efferent neurone, and by it is transformed into an efferent current. Such teaching denies that efferent neurones are capable of spontaneous or independent action or that they can be restrained from acting; and at the same time affirms that activity of nervous energy must always begin in the periphery, and can be excited only by some external agent, such as light, heat, sound waves or chemical and mechanical excitants. Such teaching must appear to be materialistic.

What has been taught about association of cells has also been taught about association of centers, for centers are nothing more than a collection of similarly endowed cells. Until Flechsig announced his discovery of the three association or silent areas of the brain, authors were a unit in teaching that there were association fibers that connected one center with another, or one center with a number of other centers. This is best illustrated by what was taught of the association of the sight center with the speech center, and of the hearing center with the speech center. It was taught that many fibers made their way direct from the cuneus to the speech center, and that neuricity was conducted along these fibers whenever visual impressions were to call into action the center of speech, and without this safe conduction of neuricity, seeing could not excite talk. In like manner it was taught that association fibers extended from the hearing center to the speech center, and that hearing could make one talk only as a result of the safe conduction of neuricity along these fibers from the former center to the latter. This teaching was apparently proven true by pathology, for disease between the cuneus

and the speech center, involving the supposed association fibers, rendered the person incapable of naming anything seen. The conclusion was easily reached that all this came about because of inability of the crippled association fibers to convey neuricity from the one center to the other. In this case the supposed association fibers connecting the center of hearing with the center of speech not being involved, sound would excite speech. Further on another explanation of these phenomena will be offered.

Flechsig has taught us that the afferent and efferent centers, such as the center of sight and the center of speech, are not directly connected, but that there is an association center which lies between the two. These association centers, he has taught us, are collected in three parts of the cortex, the silent areas already referred to. Barker, in setting forth Flechsig's teaching, uses this language: "The individual sense areas are isolated, not touching one another directly. They are separated by regions which have no direct connection, at any rate at this stage of development, with the centers below or with the periphery of the body."

It is supposed that some of the cells in the silent areas are connected with cells in the sense centers, and that other cells in the silent areas are connected with cells in the motor centers. It is also taught that fibers connect the silent areas on one side of the brain with silent areas on the other side, so as to associate them in action. But there is a difference of opinion as to how this association is effected; that is, whether these fibers go direct from one association center, by way of the corpus callosum, to an association center in the opposite hemisphere, or whether the fibers from one such center go, by way of the corpus callosum, to a center at the base of the brain, in which begin other fibers that go to the opposite association center.

If there must be a physical connection between afferent and efferent centers, then there must be millions of association fibers connecting the sensory area of the brain with the speech center, for a prick of a pin on any part of the body can excite the center of speech, for one can name the part of the body thus pricked. Or, again, there must be millions of association fibers going from the sensory area to the centers controlling the hand, for one can instantly and accurately place his finger on any part of the body that has been pricked with a pin. Or, again, there must be millions of association fibers going from the sensory area of the cortex to the centers controlling the movements of the eyes, for one can fix his eyes instantly on any viewable point of the body that has been pricked with a pin. The great multiplicity of association fibers that would be necessary to connect afferent and efferent centers is against the idea that there are any such fibers. If association fibers exist at all, they exist that neuricity may be carried from an afferent center to an efferent center to excite it into activity. Under such a condition an afferent center excited by some external agent must excite, in its turn, every efferent center with which it is connected. Thus the prick of a pin must make one speak about it, must compel him to touch the point pricked with a finger of one hand or the other, and must force him to fix his vision on it. While one who is pricked with a pin may do one or all these things, he, nevertheless, may do neither. If there is a physical connection between afferent and efferent centers there must be some power not physical that can restrain an efferent center from acting, although excited. Could not the same power call into action an efferent center not connected by association fibers with an afferent center?

That there are association centers can not be denied, but that these centers have a physical connection, on the one side, with afferent centers, and, on the other side, with efferent centers, is improbable. It is likewise improbable that association centers on one side of the brain have any physical connection—association fibers—with association centers in the other hemisphere.

The nervous system in action can be viewed in either of three lights, but only one of these can be the true light. First, the old theory was that afferent centers have a direct physical connection with efferent centers by means of nerve fibers, and that these fibers carry the afferent current of neuricity from the one to the other, the latter transforming it into the efferent current. Such a view makes a man a mere machine, incapable of being set in motion except by external influences, either mechanical or chemical, for if man's brain were thus builded every efferent current of neuricity would be a transmitted and transformed afferent current. If this theory were true man could not be a responsible being, for his every action would be determined by external influences, such as light, heat, or sound, etc. This theory may be dismissed, for no one now believes it to be true, and if not true, then materialism has no foundation on which to stand.

The second light in which nervous phenomena may be studied comes from the neurone doctrine. To accept this theory is to confess that man's body is material, but that it is dominated in all of its parts and organs by a power that is not material—a spirit power. This second theory explains nervous phenomena by declaring that the dendrites or collateral branches connect afferent and efferent neurones by contact, confessing that there is some power other than neuricity that makes the contact or prevents its being made. But, like the first theory, this one would make the efferent current of neuricity nothing more nor less than the transformed afferent current. If the neuritic current, uninfluenced, forced the contact, every afferent current would immediately excite an efferent current, and this second theory would be no improvement on the first. If contact is necessary in order that there may be any efferent current of neuricity, it must be made, if made at all, through the medium of the mind, or, more properly, the spirit. Man is responsible to his fellowmen and to his God, only because his spirit, through his nervous system, has been given control of his body.

The power that can make and break contact of dendrites or collateral branches, and can even prevent such contact, needs no physical connection, either by continuity or contact, between afferent and efferent centers that it may control the physical being. Therefore, the third theory is that the mind receives impressions through the afferent neurones, and that the mind sends impulses out to the various organs and parts of the body through the efferent neurones. The purpose of the afferent current of neuricity is to arouse some faculty of the mind, while the efferent current is set free by some faculty of the mind for the purpose of exciting into action some organ or part of the material body; that the afferent and efferent currents are not transformable the one into the other, and that the two sets of neurones are related only through the mind. This theory gives some clearness to the study of reflex neuroses, and it furnishes a foundation for the study of suggestion and hypnotism.

Man's spirit becomes acquainted with the external

world through afferent neurones. Information must come from without, and can come only through afferent neurones; but information is only raw material which must be taken by the mind to one of the silent areas of the brain, and there be manufactured into knowledge. Knowledge has for its outlet, or means of distribution, the efferent neurones. Knowledge does not come from without, nor can it be imparted to others, else we would all be equally wise. The best and highest thing that one mind can do for another is to impart information.

All faculties of the mind, or spirit powers, should be appreciated and should be studied so far as possible. There must be a great number of these, a much larger number than have yet been named. Among the few known and named are volition, memory, imagination, reason, judgment, and the visual, aural and musical faculties.

There is a spirit power that presides over every organ of the body, controlling its function in the interest of the entire body. The tireless and ever-working faculties are those in charge of the centers of respiration and circulation. The one may be called the respiratory faculty, the other the cardiac faculty. A suspension of the power of either of these faculties for even a short while means death. Probably several faculties are concerned with the various processes of digestion, and each should be named in harmony with the organ over which it presides, as the gastric faculty for the stomach, the hepatic faculty for the liver. Some faculty of the mind controls the making of the red blood corpuscles by the spleen and red bone-marrow, while another faculty must have charge of the lymphatic glands in their work of making the white blood corpuscles. The brain or cord centers that control the work of secretion of the ductless glands must themselves be governed by a mind power. So might be mentioned every organ of the body, each of which has connection with some center in the brain or cord, or sympathetic ganglion, over which center a spirit power presides.

Overtaxation of one faculty of the mind will cripple one or more other faculties, hence disturbance of the function of the organs over which they preside. These disturbances, functional at first, if oft repeated or long continued, will bring structural changes. Mental efforts, conscious or unconscious, will be made to right these errors, and, if properly directed, should succeed. If mental states alone disturbed organs in the performance of their functions, then a change of the mental state might correct these errors.

Human ills are not all functional, nor are they all imaginary. The human body has a thousand foes in the shape of germs that are ever ready to do their destructive work, if they may be permitted to enter. The God of Nature has made wonderful provisions, both within the body and without, for fighting these enemies to health and comfort. The suffering body complains to the spirit through afferent neurones that an enemy has come in; then through the efferent neurones the spirit excites into greater activity the organs that make the white blood corpuscles, whose function is to engulf and to destroy the germs. Another mind power acts through some other efferent center on some other organ or organs which are made to furnish in greater abundance the substance known as opsonin. Thus is increased the opsonic index of the blood serum, which stimulates the white blood cells in their fight against the foe. If the germs be few and not too virulent, the opsonic index may be raised without external aid, and the white blood cells may destroy them. Especially will this be so if there is a hopeful state of the mind and the judgment as to diet and rest is good. Other invasions are so overwhelming that the resisting powers of the body, stimulated ever so much by the faculties of the mind, would fail in the fight for victory unless aided by such external means as would be suited to the given case. In still other cases the germs will be victorious in spite of the combination of spirit power, bodily function and skilled medication. For every poison there is an antidote, though it may not now be known: for every germ there is a germicide, either direct or indirect, though some of these agents are yet to be found. These antidotes and germicides are both within and without the body. There are laboratories in the body continually at work producing those things that will destroy germs or neutralize their toxins, and there are other organs at work furnishing material to counteract ptomains. The individual's mind controls these internal laboratories. The mind of man for ages has been active in drawing from external nature medicinal agents that, when properly administered, will stimulate the functional action of the laboratories within and will help them in destroying germs and antidoting toxins. These external laboratories, under the guidance of trained minds and conducted by skilled hands, are to-day supplying agents that are as specific in their work as are the products of the internal laboratories, and many of them seem far more powerful than the internal agents that they are intended to help. To emphasize this it is only necessary to mention antirabic serum and diphtheritic antitoxin. As the years go by, the list of such agents will grow longer. The opsonic theory of treatment of disease gives great promise to medicine as a science and as an art.

When so much of good can come from without, how absurd are the Eddyites and others of like beliefs and practices in their outcry against the medical profession. The grain of truth they hold is the fact that the mind can influence the body; but with this grain of truth there is a ton of error. On the other hand, the medical man should not lose his grasp on the truth that the human being is a dual creature, spirit and matter, and that the spirit power can influence through the nervous system, itself material, the organs of the physical body. Cheerfulness in the sickroom and hopefulness on the part of the patient have a far fuller meaning in the practice of medicine than most physicians appreciate. The patient's confidence in his physician stimulates the internal laboratories and increases the efficiency of administered medicinal agents. Confidence lost may be restored by a consultation, but, if not restored, justice to the patient and to the physician in charge demands that he retire from the case, for these conditions make the fight unequal and the result doubtful.

Are you ready to ask me: What is man's spirit? My answer will be a question: What is matter? Answer me, and then I will answer you. This I know: When the mystic union is severed, the material part returns to the earth, from whence it came, and the spirit goes to God who gave it.

Rearing of Children.—Dr. George Carpenter, London, states in the *Dietetic and Hygienic Gazette* that for children to make a good start in life their infancy must be spared those dyspeptic disorders which are so frequent in nurslings, and which, even if they do not destroy them, nevertheless undermine their constitutions, lower their vitality, and seriously handicap them in the battle of life.

VENOUS ANGIOMA OF SKIN SHOWING BEGINNING MALIGNANCY.

CHAIRMAN'S ADDRESS BEFORE THE SECTION ON CUTANEOUS MEDICINE AND SURGERY AT THE FIFTY-EIGHTH ANNUAL SESSION, HELD AT ATLANTIC CITY, JUNE, 1907.

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In recent years, for no good and sufficient reason, the interesting subject of venous angioma has been almost entirely, if not absolutely, neglected by the dermatologist, and in consequence of this the field has been appropriated by the general surgeon.

I trust that bringing the subject to your attention again may result not only in reclaiming a subject which rightfully belongs to the dermatologist, but in stimulating original work on it to such an extent that in the future our text-books will not neglect entirely a condition which is of so much importance to the dermatologist.

Through the courtesy of my colleague, Dr. M. L. Harris, I have had the opportunity of studying the following interesting case:

Patient.—J. W. H., civil engineer, American, aged 38, married.

Family History.—Father, 70 years old, living and well. Mother died, at the age of 69, of tumor of the stomach, probably carcinoma. One sister died of pulmonary tuberculosis at the age of 21. One sister died suddenly at the age of 38. One brother died of dysentery at the age of 2. Four sisters are living and well. Two maternal uncles died of pulmonary tuberculosis. Patient has two children who are living and well.

Personal History.—The patient had measles and parotitis during childhood and had rheumatism (?) at 15 years of age. Otherwise he has always been well. He denies venereal disease.

Present Trouble.—The patient presents three tumor masses on the right leg; one on the anterior surface of the foot just below the ankle joint, about the size of a 50-cent piece; a second, covering almost the entire anterior surface of the lower half of the leg; and a third, just above the latter, about the same size as the first. The areas are bluish-gr ·, covered with a dirty crust; irregular and nodular on the surface, and elevated from one-half to three-quarters of an inch. Parts of the areas appear to be solid; others can be compressed and diminished in size. The largest area presents a deep ulcer, about the size of a dollar, the edges of which are ragged and bleed easily. These areas were congenital and at first were of about the same size. They were red, smooth and non-elevated. Later they began to take on a crusty appearance, the crusts being adherent and at times one-half inch in thickness. If the crusts were picked or knocked off, the tumors would bleed freely. The whole tumor would always bleed easily, often profusely, but he was always able to stop it himself. Any part of the tumor which became bruised or injured would heal, only very slowly, often requiring years. Until the patient was 6 years old the areas never ulcerated. At this time he was brought to Chicago, and the areas were cauterized with the actual cautery. There then ensued severe breaking down of the tissues, and the lesion never healed entirely, but the crusting tendency ceased. Occasionally there would be slight pain. The patient's occupation, that of surveyor, necessitates his walking from five to twenty miles daily, and in April, 1904, he wore a pair of leggings with metallic fasteners, which pressed against the tumor, and resulted in sloughing of the tissue and producing the ulcer described above. This has increased in size, regardless of treatment, and is rather painful.

Diagnosis.—Ulcerating congenital angioma of the right leg.

Operation.—July 5, 1904. Excision of tumors. Skin grafting. The man was discharged, well, Aug. 17, 1904.

Macroscopic Examination of Tumor.—The tumor formed a large, flattened, irregular, sponge-like mass, which on section was easily seen to be composed of varicusly sized blood channels. The skin covering the mass was thin and presented very few small hairs. Near the center of the external surface was a large excavated ulcer from 3 to 4 cm. in length by 2 to 3 cm. in width. The edge was somewhat thickened and firmer than the surrounding parts.

Microscopic Examination.—The tumor was seen to be made up of large and small, irregularly-shaped, thin-walled blood spaces, lined with endothelium. Where the spaces were small they were separated by rather a large amount of connective tissue, which was rich in round cells; but where the spaces were large the blood vessel walls, which were composed of but a single layer of endothelial cells, lay side by side, with almost no intervening connective tissue. Some of the spaces were either entirely or partly filled with a homogeneous, hyaline-like material. Where the homogeneous material occupied but a portion of the space, the remainder was still filled with blood. This hyaline material did not appear to be uniformly distributed throughout the tumor, but occurred in scattered areas only. The epithelium covering the tumor was not thickened except in the neighborhood of the ulcer. Surrounding this great proliferation had taken place, and long, finger-like prolongations dipped down deeply into the underlying tissue, but no nests or pearls were found. These projections often coalesced, and in the space thus surrounded were found large blood spaces. These epithelial prolongations suggested an epithelioma, as did the macroscopic appearance of the ulcer, but the absence of nests and the fact that no epithelial formation was present on either the lateral walls or the base of the ulcer excluded this view as to the cause of the ulcer. One could not help feeling, however, that the excessive epithelial proliferation marked the beginning of malignancy about the old ulcer. The base of the ulcer showed characteristic granulation tissue with marked round-cell infiltration. This connective tissue layer closed the large blood spaces, and this accounts for the comparative freedom from hemorrhage at the site of the ulcer.

McGregor[1] showed a case before the Glasgow Pathological and Clinical Society, Oct. 12, 1903.

History.—The patient was a girl, 15 years old. The family history was negative. Capillary nevi had been present unchanged since birth. The swelling appeared when 9 years old, gradually increasing in size. At first it was small and dark-bluish; there was no pain. After increase in size, there was difficulty in walking, with sharp, jagging pain. At the time of admission to the hospital, the girl had a large diffluent swelling of the left thigh, extending from the junction of the upper and middle thirds of thigh in front to the level of the upper border of the patella on outside of limb. It occupied most of the outer side of thigh in that area, and its inner border corresponded to the line of the internal saphenous vein. Its consistency was generally soft. There were many tortuous veins around the periphery of the growth. The tumor was prominent at the center, shading gradually to healthy tissue. This prominence almost disappeared on pressure. Scattered irregularly over the surface were twelve small pigmented spots; these were purple and slightly raised.

Treatment and Result.—The patient was treated by ligating the principal veins running into the tumor. As a result the tumor diminished in size, and pain and tenderness were lost. Interesting features of the case were the large size of the nevus; the occurrence of small capillary nevi resembling angiokeratomata, which were evidently independent growths from the rest of the tumor; the appearance of enlarging cicatrices at seat of wounds of operation, resembling false keloids.

Audrey[2] reports a case of a man, 45 years old, syphilitic.

History.—For many years he had an unusual skin lesion above the right eyebrow. It was a small, round, disc-like tumor, very little elevated above the surrounding tissue, and formed by an area of very firm, superficial infiltration. The epidermis covering it was smooth and shiny, having small, bright red spots scattered over it. It was not deeply adherent,

1. A Large Venous Nevus, Glasgow Med. Jour., 1904, lvi, 34-37.
2. Sur un Angio Epithelioma de la Peau, Jour. de Mal. Cut. et Syph., Paris, 1900, xii, 759-761.

and there was no pain. From time to time it would swell up and form scabs on top which would then come off and cause profuse bleeding. The lesion would then heal up as before. The tumor was excised.

Microscopic Findings.—The epithelial covering was thin with no papillæ. Underneath was an almost fibrous dermis, containing many capillaries. In some places this was healthy; in others were found epithelial areas typical of epithelioma. These epithelial areas were very diverse, both in form and size, and were found throughout the entire thickness of the dermis, separated at times by fibrous connective tissue and sometimes by tissue greatly infiltrated by plasma cells. In fact, it had the usual structure of *ulceras rodens*. The unusual part of the structure consisted in the presence of large blood spaces filled with blood and situated very superficially. One or two giant cells were found. The tumor, therefore, was an angioma of slow development, but combined with superficial angioma.

The histologic examination accords perfectly with the symptoms observed (hemorrhage, long duration, persistence), but the exact significance of the lesion remains undetermined.

Did the angioma precede the epithelioma or the epithelioma precede the angioma? Or are they contemporaneous? Or should one consider the whole lesion as the terminal stage of an evolution, etc., according to Cohnheim's theory that the lesion is the tardy development of a congenital tumor? Audrey inclines to the last proposition. The angioepitheliomas should, it seems, be considered as a peculiar type of epidermal neoplasms of embryonal origin.

Morestin[3] reported a case of a little girl, 10 years of age.

History.—The tumor existed from birth on the inner mucous membrane, on the side of the lower lip. Vertically, it extended from the free edge of the lip to the furrow formed by the gums and the lip. The whole tumor resembled an almond without its shell. The surface of the tumor was a red color, with little raised places here and there, some of which were violet-colored, while others were a pale pink. On palpation the tumor was firm, non-reducible, rather well limited, and grown in the mucous membrane, though showing some mobility on the muscular layer. There was no pain. The diagnosis was circumscribed angiolymphangioma. The tumor was excised.

Microscopic Findings.—Sections showed a large number of blood vessels and enormous lymphatics. The labial glands were altered and inflamed. The mucous membrane covering the tumor was thickened and modified, and contained a great number of blood capillaries and dilated lymphatics. The papillæ were higher and larger than normal.

Stangl[4] first gives a short résumé of the nomenclature of tumors arising from the blood vessels; then he reports two cases.

CASE 1.—A girl aged 20, for many years had a small, bluish-colored, slightly swollen place on the ulnar side of her right forearm. This began increasing in size. A smaller similar spot appeared on the skin near by. The tumors were excised.

Microscopic Findings.—In the loose subcutaneous fat ran broad bands of dense connective tissue, in which appeared large, irregularly-shaped blood spaces, which often communicated with one another and were filled with blood. The walls of these spaces showed the following characteristics: In some places they showed a single layer of flat endothelial cells, so that the small spaces had the appearance of capillaries. In other places on the layer of endothelium were one or more layers of cubical cells, with dark nuclei, and small irregular protoplasmic bodies. These cells lay directly on the endothelium, so that it seemed to be surrounded by a thick cell-mantle. These spaces contained blood. In the connective tissue septi also ran apparently unchanged capillaries. The stroma of the tumor was dense connective tissue, not very rich in cells.

CASE 2.—A girl, aged 18, had a tumor, the size of a nut, on her little finger. She also had a smaller one near by. The tumors excised.

Microscopic Examination.—The tumors possessed firm capsules, were rich in cells, and contained large blood spaces filled with blood. The tumors were made up of medium large, polygonal, or round cells, having a clear protoplasm, with round chromatin bodies and clear cell boundaries. The cells lay directly on one another and showed no intercellular substance. The stroma of the inner part of the tumors was particularly rich in blood vessels, which seemed to be intimately connected with the tumor cells. The blood vessels of the tumors showed marked changes. In the smaller arteries the endothelial lining could be clearly seen, but in others it seemed to have a homogeneous appearance. Many times the endothelial layer disappeared, and in place of the vessel lumen there was a solid homogeneous structure, on which the tumor cells above described lay. There were hemorrhages throughout the tumor. Stroma was lacking in the inner part of the tumor, and broad bands of connective tissue ran down from the capsule into the outer layers.

Stangl[4] discussed the question as to whether tumors were of epithelial or connective tissue extraction. He considers the two cases described as rightly named perithelial tumors.

Ribbert[5] says that to understand clearly the genesis of angiomas one must decide between two questions:

Is the tumor a simple dilatation of the vessels in a circumscribed area? Is it the result of new growth? If one holds to the second opinion, one must decide whether the tumor arises from increase of tissue of normally inserted vessels or grows out of an originally independent germ which has become free from its normal connection.

Ribbert advocates the latter view, and the following article is to strengthen proofs already set forth in former article.[6]

CAVERNOUS ANGIOMA.

Two varieties may be selected as examples: First, skin angiomas having wart-like form; second, angiomas of the liver.

Angiomas of the skin are characterized by their intimate relations to the neighboring structures; that is, sometimes with the subepithelial connective tissue and sometimes with the deeper corium, where the vessel walls are of endothelium placed directly in contact with the connective tissue. The connective tissue is sometimes scanty and sometimes plentiful, but often irregular, so that little groups of vessels are often cut off from similar groups by thick connective tissue bands. The angioma is thus divided into lobules. The connective tissue is mostly poor in cells, but rich in nuclei. The new growth gradually shades into the surrounding corium, so that there are no sharply defined borders to the tumor.

Neither small openings nor any signs of them are found connecting the blood spaces of the tumor with the vessels of the neighborhood, nor is there any indication that, by the gradual narrowing of the wide lumina, they are transformed into capillaries, or that the lumina themselves are transformed into capillaries. These views are not changed at all by the fact that in angioma there are arteries running into the tumors and veins leaving them.

To show the independence of the blood spaces in angioma from the blood vessels of the surrounding tissue, Ribbert injected some angiomas. By means of a direct puncture into the tumor mass he found that only

3. Tumeur Congenitale de la Levre Inferieure: Angio-Lymphangiome, Bull. Soc. Anat. de Par., 1898, lxxiii, 430.
4. Zur Kentniss der Perithelialen Blutgefasstumoren der Haut.
5. Ueber Bau, Whachstums und Genese der Angiome, Arch. f. Path. Anat., etc., Berlin, 1898, cli, 381-481.
6. Ueber Ruckbildung an Zellen und Geweben und uber die Entstehung der Geschwulste.

the angioma itself was colored, while the surrounding tissue was not affected.

Microscopically, it was shown that the blood in the spaces of the tumor was either driven out or mixed with the material injected, while nowhere did the coloring matter pass the borders of the tumor.

There existed no anastomoses with the capillaries in the surrounding tissue; the angioma showed a circulation shut off within itself, with only a connection with the arteries and veins of the neighborhood.

These results would not allow him to think that the tumor grew in extent through its relationship to the surrounding capillaries which became dilated. The growth came, then, from a dilatation of the vessels already existing there, and by their increase in number and size by a process of new growth.

Considering these angiomas as new growths, then, we have no right to infer that originally the vessels of the new growth were not included in a normal way in the circulatory system, and only later should have isolated themselves as a tumor. It is much more probable that the relation of the tumor to the surrounding tissue was the same from the beginning, and that the complex system of vessels composing it had always had an independent existence.

Since the multiple, wart-formed angiomas here described are congenital, we may refer their beginning to the time of the development of the skin, and may infer that in the formation of a circulatory system a blood vessel tumor was not formed in a normal way, but grew by the assistance of a little piece of independent connective tissue imbedded there.

ANGIOMAS OF THE LIVER.

After investigating these tumors, Ribbert comes to the conclusion that they are also independent tumors, growing not by spreading to surrounding tissues, but from within themselves. (*Die Telangiectesie. Das Lymphangiom*). He describes these tumors and gives a description of the genesis of the cyst formation.

Dutton[7] reports a case of a girl, 8 years old.

History.—A large nevus on ear was treated and became somewhat improved. Two small tumors appeared; one larger, a somewhat pedunculated tumor, about the size and shape of a pea; the other smaller, but similar. The tumors were removed and sections were made.

Microscopic Examination.—The tumors showed but poor development of both epidermis and corium; no papillæ. Large veins ran in every direction, surrounded by thick fibrous adventitia. Outside this adventitia and running parallel with blood vessels were dense masses of endothelial cells, imbedded in hyaline material. Outside these endothelial areas were strands of fibrous tissue which limited them and separated them from each other.

In looking over the literature, I could not find any tumors described which correspond to these.

Lamy[8] states that angiomas are congenital vascular productions, due to modifications occurring in the course of embryonal development. They most often occur in the regions in the face and neck where the branchial clefts appear. Virchow has named them angioma-fissuraux.

The angiomas of the face appear in a series, and their extent marks the differentiation of the germinal areas at whose expense they are formed. One has then: Angiomas of the frontal germinal area; angiomas of the superior maxillary germinal area; angiomas of the inferior maxillary and those of the second branchial arch.

This differentiation, according to germinal areas, is confirmed by the analogy which angiomas present with other congenital malformations (intermaxillary clefts; atrophy of inferior maxillary—congenital lymphangiomas).

In order to explain the production of angiomas, it is necessary to have a sufficient cause (disease of the embryo), favored by histologic circumstances (a vascular region) on an anatomic position (one where such lesions frequently occur), at an early period in the development of the embryo.

BLOOD ANGIOMA.

Vascular tumors that are macroscopically recognized as such may be differentiated in many instances only with great difficulty from the simple dilatations of preexisting blood spaces. To call the lesion a tumor it is essential to prove a progressive new formation of vessels. In such cases it is not necessary that all three layers of the vessels participate; frequently the muscularis is entirely wanting. Again, we see, in tumors even of an absolutely benign character, the irregularity in the formation of the details of the cellular construction. Ordinarily we make a distinction between the different forms of simple "blood angioma": 1, Angioma simplex; 2, cavernous angioma; 3, hypertrophic angioma.

The first and third forms are closely related with each other and may exist combined. Angioma simplex appears principally in the skin as a light red or blood-red discoloration, in many instances not in the form of a neoplasm. It consists of newly-formed arteries and veins, which are surrounded by an abundance of connective tissue. In cases of telangiectasis we are dealing chiefly with neoplasms of the capillary vessels. If they are very abundant, the result may be a vascular nevus, ordinarily with thinning of the epidermis and flattening of the papillary bodies.

These simple, tumor-like growths of the subcutaneous vessels, which in their structure are often similar to the little fat clusters of the subcutaneous cellular tissue, resemble very much the form to which Ziegler has appropriately applied the term hypertrophic capillary angioma. The substratum of this form of angioma consists of thickened capillaries and in a hardened section of an atypical case with little intervascular tissue, in which the empty capillaries appear compressed, the microscope may show an appearance much resembling a benign adenoma, as of a sweat gland.

Diagnostically, much more easily do we recognize angiomas of wide cavernous spaces, often found in the liver, but likewise frequently seen in this form, which is the most frequent, and which may occur in almost any organ, and is absolutely benign in character, so long as no damage is done by its position or from hemorrhage. A transformation into a malignant mixed form, with the appearance of nucleated cells in the connective tissue stroma, is a very rare occurrence.

Angiosarcomata which are not very uncommon have an entirely different structural development. These may be a combination of hemangiomata, with increase of connective tissue or fat (angiofibroma and angiolipoma), which should be called telangiectatic fibroma or lipoma. The cavernous type may lead to thrombus,

7. Two Vascular Tumors, with Marked Endothelial Proliferation Growing from the Skin in the Neighborhood of a Large Congenital Nevus of the Right Ear of a Child, Liverpool Medico-Chir. Jour., 1898, xviii, 369-375.

8. Contribution à l'Etude des Angiomes Fissuraux, Paris g. Steinheil, 1900, No. 515, p. 64.

the lumina becoming entirely filled with round cells; furthermore, it is possible to find a brownish pigment which can easily be differentiated from melanosarcoma. Very rarely do the thrombi become calcified.

In conclusion, I desire to express the belief that venous angiomas do not take on malignancy, but that on account of the constant irritation due to their presence the overlying epithelium may take on carcinomatous changes.

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Original Articles

CATARACT EXTRACTION.

I. IS THE CASE OPERABLE? II. PREPARATION OF THE PATIENT. III. THE ANESTHETIC.*

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I. IS THE CASE OPERABLE?

In opening this subject I fear that I have little to give that is new or even interesting. The question whether a case is operable must be decided from three standpoints—that of the general health of the patient, the condition of the eye and its surroundings and the state of the cataract itself. There has been, as far as I know, but little recent change in the accepted views on these points. Chronic heart, lung and kidney disease and diabetes are no longer considered bars to operation, provided the patient is put into the best general condition which his disease will permit, and also provided, of course, that this condition justifies the operation. Coughing reduced by treatment to a minimum, the inability to lie down in bed and other necessary concomitants of the diseases mentioned are not as important as the estimate of the general condition of the patient. And as the operation can to a certain extent be adapted to the needs, such diseases are of importance not so much on account of the possible difficulty in operating as from the increased susceptibility of the patient to infection by decreased resistance and to post-operative delirium with its attendant misfortunes. This, it seems to me, is about the worst of post-operative troubles. Old age also is not in itself a contraindication to operation; senility, however, is.

We have to do, in our estimate of the general condition, not with the success or failure of the operation from the point of view of vision, but with the possibilities of suppuration or plastic inflammation, entailing long suffering and many times shortening life. The statistics of suppuration in cataract cases at the Massachusetts Eye and Ear Infirmary for the last ten years show that about a third of the cases were due to infection by the hands, in most instances in connection with delirium. Marked arteriosclerosis and hypertension increase the risk of choroidal hemorrhage, but treatment will alleviate the condition somewhat and operation is justifiable. I have never seen sudden death follow cataract extraction in the old; I have, however, seen most of the other possible melancholy results, and my dread of them is genuine. It is well then to make the estimate of the general condition as carefully as possible, with the history of the past as well as the present in view. After all is done that can be there yet remains the unknown element. Patients with everything apparently in their favor may go to pieces and others with evident cause for fear go through the ordeal with astonishingly little upset.

In the consideration of the eye and its surroundings the condition of the tear passage is of the greatest importance. There is, I think, nothing new to be said of it; it is, and bids fair to remain, the greatest source of danger, not only in its diseased state, but to a certain extent in its normal condition as a channel for infection from the naso-pharnyx. If treatment of the more ordinary kind does not relieve the case sufficiently to justify operation, we must have recourse to the extirpation of the sac, obliteration of the canaliculi with the cautery or occlusion of them temporarily with a suture. I have found in a limited experience that this last procedure has been satisfactory. It is generally regarded, I think, that a purely watery secretion from the sac is harmless. Perhaps it is in itself, but I am confident that I have seen such a discharge changed under the influence of the bandage into a virulently purulent one, and I would suggest in any such case that a preliminary test with the bandage be made for a few days.

I am distrustful of eczema. The bandage, of course, aggravates it, and either because of the trouble itself or from the irresistible desire of the patient to lift the bandage and scratch, thus causing infection, there is considerable danger. The condition of the conjunctival sac and edge of the lids also demand attention. It seems impossible, for a number of reasons, to make bacteriologic investigation a basis for operation, but in any suspected case the recommendations of Dr. C. S. Bull should be carried out:

> A careful microscopic and bacteriologic examination should be made of the contents of the conjunctival sac in every suspected case, carrying the examination as far as the cultivation of the bacteria in a proper medium and the subsequent inoculation of the germs. If toxic germs are found in great number, no matter what their varieties, no operation on the eyeball should be undertaken until the germs have disappeared, and the conjunctival sac has been rendered as sterile as we can hope to make it.

In a given number of infections there are always some which are not easily explained by the more ordinary and well-known causes. It is quite possible that the state of the naso-pharnyx may account for some of these. No one, of course, would operate during any acute process in that region, but there are also chronic conditions which should be taken into account, such as chronic and atropic rhinitis with crusts about the lachrymal duct, ozena and tonsillar crypts. In any case preliminary cleansing of the passages as recommended by Dr. Lippincott is an added safeguard.

The question whether the case is an operable one has to do also with the condition of the cataract—whether it is immature, ripe or hypermature. I take it that it does not come within the scope of this short paper to discuss all the problems relating to this part of the subject. It is certainly right to operate on a hypermature cataract under any conditions which make immediate operation advisable. To this form of cataract, it seems to me, the extraction in capsule is most applicable, and if it were possible to eliminate the disadvantages of this operation, hypermaturity of a cataract would be the condition of choice. The problem of the immature cataract seems about as far from solution as ever. Ripening operations have not, certainly in my part of the country, proved popular, and my own small experience

*Read in the Section on Ophthalmology of the American Medical Association at the Fifty-eighth Annual Session, held at Atlantic City, June, 1907.

has not been favorable. Intracapsular irrigation, too, has not gained the majority as adherents, certainly not as used by McKeown for the ripening of cataracts. Extraction in capsule is too hazardous, and I should feel that its performance was unjustifiable unless the prospects of an improved condition were remote and other urgent reasons for its performance were present. We meet cases, however, at times in which it would seem that the risk of operating was no more than that brought about by frequent examinations and disappointing postponements.

II. PREPARATION OF THE PATIENT.

The preparation of the patient should be general—physical and mental—in addition to that accorded the eye. The first thing of importance is the state of the bowels. Recent writers have shown how intimate and important is the relation of the eye to the intestinal canal. It would be well to inquire into the patient's history in this respect and correct any abnormality as far as possible beforehand. The customary cathartic should be given the night before the operation, followed by a saline the following morning, being sure that the effects have passed before operating.

A warm bath should be given. Shampooing the head seems to me objectionable in a patient not used to it. It is likely to cause a cold, an unpleasant accompaniment of a cataract extraction. The eyelids and surrounding region, especially the brow, should be well washed with soap and water and wiped with sterile gauze or cotton; the edge of the lids should be carefully cleaned and wiped with the same. The conjunctival sac must be washed out gently with sterile water or physiologic salt solution. In many cases, perhaps in all, it would be well to drop argyrol in the eyes for a few days beforehand. In spite of the doubts recently cast on this drug, I believe it to be a very efficient one. It was the older custom at the Massachusetts Eye and Ear Infirmary to make all these preparations the night before the operation and to bandage the eye over night, often with the addition of some antiseptic salve. The next morning the eyelids were, in many cases, stuck together and there was secretion in the conjunctival sac. This practice was soon abandoned and the cleansing was done on the morning of the operation. The present routine method, however, and the general rule of the hospital for all operative cases is to make the preparations the night before, to put White's ointment of bichlorid[1] in and over the lids and to bandage. Under this method it is rare to find the eye in the morning other than perfectly white and quiet, and free from secretion. Certainly from a clinical standpoint this has proven satisfactory, though I am not aware that any bacteriologic tests have been made. After the bandage has been removed the less done the better; gently wiping the lid margins again, as would naturally be done to remove superfluous salve, and gentle irrigation of the sac with the salt solution is sufficient. After this, until the actual operation, the eye should be kept covered with a moist piece of sterile gauze or cotton.

There is beside this another preliminary of importance—the mental preparation of the patient. I believe it helps the patient to bear the operation and the after treatment if he is told what he may expect and what is required of him. It is wise that he should believe the operation simple and that it will almost certainly be successful. He should be told what he must and what he must not do during the operation; instruct him to think not of what is being done but of what he is told to do, to make any ordered movements slowly and to be relaxed and calm.

I am not of the opinion, however, that the same mental preparation ought to be accorded the relatives and friends. Some one at least should know that the surgeon is to do something more than shell out a pea, though that simile may do for the patient. We have been so diligent in making patients comfortable concerning cataract extraction that I think the operation is generally considered simple and failure impossible, even by physicians, if I may judge from what I have heard. I think the operator owes it to himself that some one should know the true state of affairs, not necessarily, however, all the disagreeable possibilities. In the hospitals, and to a certain extent outside, tradition does much for the favorable mental preparation of the patient. One patient tells another that there is no pain to dread and that the discomfort is trivial.

Just before operating a repetition of the instructions, a short drill in the needed movements and during the operation, gentle and encouraging guidance, are helps of great value. It seems to me undesirable that the patient should be in the hospital more than one day before the operation. He can in that time become perfectly familiar with the surroundings, longer than this will be spent in worry and fear. During this time the room should not be darkened. A hypnotic to ensure a good night's rest is often advisable. With the use of morphia for this purpose, and with its more prolonged use for the alleged beneficial action on the healing process, I have had no experience. I should feel that to justify such use its advantages must be many.

III. THE ANESTHETIC.

Of local anesthetics one has a considerable range of choice. My personal experience is limited to cocain and holocain. I have, however, found no one who, having experimented with alpha-eucain or beta-eucain and tropacocain, has been converted to their use. Alypin (hydrochlorid of benzoyl—2—ethyl—1, 3—tetramethyldiaminopropan—2—ol) may prove valuable, but at present little can be said about it. These anesthetics differ one from the other in the rapidity, duration and intensity of their action, in their influence on the pupil, in their irritating and antiseptic qualities and also in the amount of hyperemia they cause. They differ, too, in toxicity, holocain and cocain being the most poisonous of the group. This, however, amounts to so little that it need hardly be considered. If the patient were known to be very susceptible to cocain, tropacocain, which is the least toxic, could be substituted. Holocain has enjoyed considerable popularity on account of its having no action on the pupil, tension or corneal epithelium and because of its bactericidal properties. Of these advantages, the only practical one, it seems to me, is its freedom from action on the pupil. It is on this account, theoretically at least, more fitted for use in simple extraction than is cocain. The effect of the latter on the corneal epithelium can usually be avoided. It is not necessary to go further into detail on this subject. It would seem then that cocain was the most generally useful of the anesthetics, holocain being substituted for it in certain cases.

The method of using the cocain is of some importance. The 2 per cent. and 4 per cent. solutions are most commonly used and seem sufficient. Dropped in the eye

1. This ointment, recommended by Dr. J. A. White of Richmond, Va., is as follows:

R.	Hydrarg. bichloridi	gr. 1	06
	Sodii chloridi	gr. v	30
	Petrolati	ʒvi	180

two or three times at five minute intervals good anesthesia results. The use of a 10 per cent. solution tends to emphasize the disadvantages of cocain, and I think it preferable for anesthetizing the deeper structures, to allow a drop of the weaker solution to run into the anterior chamber, after the section has been made.

THE INCISION FOR THE EXTRACTION OF CATARACT AND THE IRIDECTOMY.*

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In studying the incision employed for the extraction of cataract we need not go further back in the history of the incision than the time of Daviel.[1] The operation of extraction, as a recognized method of removing cataract originated with Daviel, the method having been matured about the year 1750.

The incision employed most frequently by Daviel and the one referred to when the term "Daviel's incision" is used is a flap incision (Fig. 1) made entirely in the corneal tissue close to the scleral margin. The cornea was first pierced by means of a broad needle at its lower margin; then, by means of small, blunt-pointed knives and by curved scissors (Daviel's scissors, right and left), the incision was continued on either side until almost two-thirds of the cornea near its margin had been divided. In the latter years of Daviel's life the incision was made shorter. In order to afford more support to the iris and to simplify the incision, Daviel introduced, during the last years of his life, a triangular incision (Fig. 2) with the base inward in some cases, with the base upward in other cases.

Since Daviel's time many forms of incision have been introduced. The principal ones will be described in chronological order.

Richter[2] advised an incision in the lower half of the cornea (Fig. 3) close to the margin of the cornea, to be employed in the operation for removing the lens in its capsule by gentle pressure after first freeing the lens from its attachments to the suspensory ligament.

De Wenzel[3] employed an incision (Fig. 4) through the cornea extending from the temporal to the nasal margin in the horizontal meridian for the removal of opaque, shrunken lenses and soft cataract. A few years later De Wenzel advocated a flap incision for the extraction of cataract (Fig. 4). The line of the incision followed the margin of the cornea ¼ line (0.5 mm.) from the sclera and extended from a point 45 degrees above the horizontal meridian on the temporal side to 45 degrees below the horizontal meridian on the nasal side, thus including one-half the circumference of the cornea. It was thought that such an incision would be less apt to gape because of the support of the upper and lower lids.

Santerelli[4] advocated a corneal flap upward, including about three-fifths of the cornea. The incision follows the periphery of the cornea, its central point falling on the vertical meridian of the cornea above (Fig. 5).

Beer[5] began to employ the Richter incision in 1790 and appears to have practiced it continuously, making the flap downward as a rule, but also making it upward in not a few cases. Beer introduced the triangular knife which still bears his name, the use of which markedly simplified the making of the incision (Fig. 3).

Mr. Wardrop[6] introduced an incision, which is described as follows (Fig. 6): Puncture on temporal side of the cornea one line from the scleral margin and a little above the transverse diameter, the direction being perpendicular to the surface of the cornea. When the point of the knife has entered the anterior chamber it is directed to a corresponding point on the nasal side of the cornea, where the counter-puncture is made. The incision is then carried a little downward and forward, then the knife is rotated sharply so that the edge is directed forward and the incision is finished by cutting directly outward, nearly perpendicular to the surface of the cornea. The incision should be made so that the lower margin of the wound is midway between the lower margin of the cornea and the lower margin of the moderately-dilated pupil. Its advantages are: 1, Large opening; 2, firm flap, not very large; 3, corneal margin broad to support iris.

The linear incision, variously placed in the cornea and of various lengths, was employed even before the days of Daviel for removing soft lens substances.

Sir William Adams[7] employed the linear corneal incision for removing all cataracts which could be broken up.

Guthrie[8] made the incision in the lower part of the cornea, most often (Fig. 7) beginning slightly above the horizontal meridian and carrying the incision around the periphery of the cornea one line from the scleral margin. In some cases the incision was made above.

Fig. 1.—Daviel's incision. Fig. 2.—Daviel's inter-incision. Fig. 3.—Richter's incision (Beer's knife).

Makenzie[9] advocated the flap incision and recommends that it be made in the upper part of the cornea in all cases except in those patients who have difficulty in looking down, when the incision should be made in the lower half of the cornea.

Graefe's classical linear incision was the result of his experience in the extraction of cataracts by means of the linear incision in the cornea, first employed by Palucci for removing membranous opacities from the pupillary area, and his desire to place the incision so that the loss of eyes from suppuration would be less frequent. The loss from suppuration when the corneal flap was the incision employed was from 7 to 10 per cent. Graefe urged, and very rightly so, that the healing of the wound would progress more rapidly if it were made where the blood supply was abundant, and that the resistance of the tissues to injurious influences would be greatest when the nutrition to the tissues was best. By placing the incision in the sclera he succeeded in reducing loss by suppuration very considerably. After a careful and prolonged study of the subject, evidence of which appears

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*Read in the Section on Ophthalmology of the American Medical Association at the Fifty-eighth Annual Session, held at Atlantic City, June, 1907.

1. Sur une nouvelle methode de guerir la cataracte par l'extraction du cristellin, Mem. de l'Acad. d. chirurgie, 1753.
2. Abhandlung v. d. Ausziehung d. grauen Staar, Göttingen, 1773.
3. Traité de la Cataracte, Paris, 1876.
4. Ricerche per facilitare il cateterismo e l'estrazione della cataracta, Vienna, 1795.
5. Lehre d. Augenheilk., 1817.
6. Practical observations on the mode of making the incision of the cornea for the extraction of the Cataract, London, 1808.
7. New Operations for the Cataract, 1817, p. 138.
8. Operative Surgery of the Eye, London, 1830, p. 320.
9. Diseases of the Eye, American Edition, 1855, p. 747.

in the many articles on cataract extraction written by him,[10] Von Graefe selected the incision described below. The incision was placed almost tangentially to the upper margin of the cornea just below the clear margin. It described an arc in the sclera, its radius being nearly that of the sclera. It departed very little from the linear incision, having a height of from 0.50 to 1 mm. The length of the incision was from 10 to 11 mm., according to the size of the lens to be extracted (Fig. 8). The linear knife which bears Graefe's name was employed.

One of Graefe's descriptions of his incision is as follows: The incision is made above with the narrow knife, the flat surface forward. The point of the knife is entered ½‴ (= 1 mm. plus) from the margin of the cornea and 2/3′ ″ (= 1.46 mm.) below a line tangential to the summit of the cornea. In order to make the inner wound as large as possible, the point of the knife is directed toward the middle of the pupil in front of the iris, and when the point has penetrated into the anterior chamber 3‴ (= 6.50 mm.) the handle of the knife is depressed and the point is pushed toward the place of counter-puncture exactly opposite the place of puncture. When the counter-puncture is made the blade of the knife is turned on its long axis, so that the back of the knife is directed toward the center of curvature of the cornea, and the incision is finished in this plane by to-and-fro movements. The knife, after it clears the sclera, is beneath the conjunctiva, which is now cut through, making a long or short conjunctival flap as desired.

Von Graefe made many experiments with conjunctival flaps.

Jacobson[11] practiced and advocated the making of an incision which was placed in the sclera 0.5 mm. from the limbus (Fig. 9), and included almost the entire lower half of the cornea. The extraction was accompanied by iridectomy.

Fig. 4.—DeWenzel's incision. Fig. 5.—Santorelli's incision. Fig. 6.—Mr. Wardrop's incision.

Stellwag von Carion, about 1864, advocated an incision which was made upward in the limbus conjunctivæ and included two-fifths of the circumference of the cornea.

Critchett[12] endeavored to make the incision as small as possible and to aid the escape of the lens by means of the curette. The incision was a flap in the upper sclerocorneal junction, including one-fourth of the circumference of the cornea (Fig. 10). The removal of the lens was preceded by an iridectomy (preliminary iridectomy). Critchett had used this method many years before the date of the above reference.

Horner, referred to by Stellwag, employed an incision wholly scleral, including one-third of the circumference of the cornea, beginning 1 mm. from the corneal margin, cutting upward and finishing the incision 1.5 mm. from the corneal margin (Fig. 11).

Steffan[13] made the puncture and counter-puncture 2 mm. below the horizontal meridian 1.5 mm. from the margin of the cornea, the distance between these points being 13 mm. The incision was so made that in individuals more than 40 years of age its lowest point was 1.5 mm. from the lower margin of the cornea (limbus); in individuals more than 45 years of age, 0.5 to 1 mm. from the lower margin of the cornea (Fig. 12).

Weber[14] made a careful study of the incision. He advised the use of a lance-shaped knife especially constructed. It measured 10 mm. wide at 6.5 mm. from the point and maintained this measurement 2 mm. further in order that the wound on the inner surface of the cornea might be made of the same length as on the outer surface. The blade was then narrowed to the shank. The under surface of the blade was slightly concave (illustration in *Graefe's Arch.*). For making incisions in the cornea above or below, the blade was bent on the flat, 8.5 mm. from the point at an angle of 120°. Weber designed to perform extraction without iridectomy. The knife was made to enter the cornea at the sclerocorneal junction, the inner edge of the wound being removed from the insertion of the iris into the ciliary body about 3 mm. The incision was made by choice at the lower or at the lower inner margin of the cornea. When iridectomy was determined on previous to the incision, the incision was made above. The globe was fixed immediately opposite to the point of the commencement of the incision. The incision (Fig. 13) beginning at the sclerocorneal junction, was carried slightly obliquely through the tissue of the cornea. After the point of the knife had entered the anterior chamber, the plane of the knife blade was made to advance in the plane of the base of the cornea and it was introduced about 8 mm., insuring an incision of 10 to 10.25 mm. The ends of the incision extended into the sclera about 1 mm. from the corneal margin. On removing the knife, which was done slowly, slight backward pressure was made to cause as little disturbance to the iris as possible. As a rule, the conjunctiva overlapped the outer extremities of the incision a very little. This was divided if it interfered with the escape of the lens.

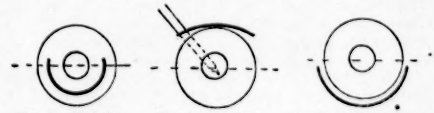

Fig. 7.—Guthrie's incision. Fig. 8.—Graefe's incision. Fig. 9.—Jacobson's incision.

Iridectomy was made: 1, If the rigidity of the sphincter iridis interfered with the escape of the lens; 2, if the iris prolapsed greatly; 3, if the iris was much injured when the lens escaped; 4, if it was difficult to restore the iris to its normal position; 5, if much lens cortex remained.

Kuchler[15] advocates the use of an incision extending directly across the cornea in the horizontal meridian, beginning and ending slightly in the sclera (Fig. 14), the incision of De Wenzel slightly elongated.

Lebrun[16] introduced an incision which he termed the "small median flap," termed by Warlomont the "Belgian incision" (Fig. 15). It is a curve with the convexity upward, lying chiefly in the upper corneal segment. A medium-sized Graefe knife is employed. The puncture and counter-puncture lie at the sclerocorneal junction about 2 or 3 mm. below the horizontal meridian of the

10. Graefe's Arch., I., No. 2, 219; v, No. 1, 158; xi, No. 3, 1; xiv, No. 3, 106.
11. Ein neues u. gefahrloses operationes verfahren zur Heilung d. grauen Staars, Berlin, 1863.
12. Ann. d'oculistique, 1864.
13. Erfahrungen u. Studien über die Staroperation, Erlanger, 1867.
14. Graefe's Archiv., 1867, xiii, No. 1, 187.
15. Die Querextraction des grauen stares d. Erwachsenen, Inaug. Diss., Erlangen, 1868.
16. Compte rendu du Congrès de Londres, 1872, supplement, p. 217.

cornea. The incision ends at the junction of the upper third with the middle third of the cornea in the vertical meridian. The incision is designed to avoid iridectomy.

In 1885 Galezowski[17] advised a similar incision placed somewhat higher at the ends (2 mm. below the horizontal meridian), and likewise designed to avoid iridectomy.

Liebreich[18] advocated an incision in the lower part of the cornea, beginning with the puncture 1.5 to 2 mm. below the horizontal meridian, 1 mm. in the sclera, the counter-puncture being at a corresponding point opposite. The incision extends downward at 45 degrees for about one-half the width of the flap and is terminated by a curve, the apex of which is from 1.5 to 2 mm. from the margin of the cornea (Fig. 16). A Graefe knife was employed.

E. de Jaeger[19] advocated an incision which began in the sclera 3.5 mm. below a line tangential with the upper margin of the cornea, 2.5 mm. from the corneal margin, the counter-puncture being made at a corresponding point. The center of the incision corresponded with the clear margin of the cornea above (Fig. 17). The incision was about 12 mm. long externally, about 11 mm. long on the inner surface. The incision was made with a narrow bistoury, hollow-ground on one side, right and left. The knife was entered with the concave surface forward. This incision resembles that of von Graefe to some extent. A large iridectomy was always made.

Arlt[20] employed an incision which is a compromise between the Graefe incision and the old flap incision. It resembles that of E. de Jaeger, differing in that it does not enter into the sclera so far and that it is placed more in the limbus conjunctivæ.

Fig. 10.—Critchett's incision. Fig. 11.—Horner's incision. Fig. 12.—Steffan's incision.

Horner[21] employed an incision beginning 1 mm. from the corneal margin, 3 mm. below a line tangential with the summit of the cornea. It had a base of 12 mm. and a flap 3 mm. high. The incision was finished in the sclera about 0.5 mm. from the corneal margin. A rather large conjunctival flap was made (Fig. 18).

De Wecker[22] advocated the making of an incision located at the limbus conjunctivæ, forming a flap one-third of the diameter of the cornea in height. This is really an incision that includes almost two-fifths of the circumference of the cornea. A narrow Graefe knife was employed (Fig. 19).

Snellen's section is made just outside of the clear cornea (0.5 mm.), including about two-fifths of the circumference of the cornea upward, and is completed with a conjunctival flap 2 or 3 mm. long (Fig. 20). It is made with a narrow knife.

Many varieties of the incisions described have been made, the greater number falling in the upper half of the cornea being modifications of the linear or of the flap incisions (Fig 21). However, these approach the incisions described so closely that it is not necessary to be more explicit regarding them.

There is one incision that is advocated by some operators of which a few words may be written. The incision is made with a narrow (Graefe) knife. The puncture and counter-puncture are made in the limbus so as to include about two-fifths of the cornea above. The incision is then continued in the limbus with the plane of the knife in the plane of the base of the cornea until three-fourths of the incision is completed, when the knife is turned to cut directly outward. This divides the corneal tissue by the last maneuver at right angles to the surface, leaving a segment of clear cornea about 1 mm. in depth above. It is thought that the "shoulder" thus formed gives better support to the flap, and that a subsequent good healing, with slight danger of relapse of the iris, is assured (Fig. 22).

SUBCONJUNCTIVAL INCISION.

The only incision of this nature that has awakened any special interest is that described by Czermak.[23] The incision is made below in the sclerocorneal junction and includes almost one-half of the circumference of the cornea. It is commenced by a puncture, made with a wide Graefe knife, just below the horizontal meridian, cutting through conjunctiva, sclera and cornea at the scleral margin (Fig. 23). The point of the knife is advanced to the center of the pupil, preferably into the lens capsule, and is then withdrawn. A vertical incision downward in the conjunctiva, 12 to 15 mm. long, starting from the primary incision, is now made and the conjunctiva is detached from the underlying tissue. By means of specially constructed scissors, curved on the flat, the incision through the fibrous coat is continued in the sclerocorneal junction beneath the conjunctiva, until a point opposite to the puncture is reached. The other steps of the operation are then proceeded with. This extraction is performed without iridectomy.

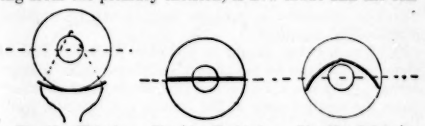

Fig. 13.—Weber's incision. Fig. 14.—Kuchler's incision. Fig. 15.—Lebrun's incision.

Knapp[24] makes puncture and counter-puncture in the limbus conjunctivæ from 0.5 to 1 mm. above the horizontal meridian of the cornea and completes the incision upward in the plane of the base of the cornea, making a small conjunctival flap. The incision includes a little more than two-fifths of the circumference of the cornea.

Fuchs[25] makes the incision of De Wecker, except that he makes a small conjunctival flap.

De Schweinitz[26] makes De Wecker's incision with a small conjunctival flap

SCLERAL INCISION.

The removal of cataract by scleral incision posterior to the incision of the ciliary body is not practiced by ophthalmic surgeons at the present time. However, it is of interest to note that extraction by means of such incision has been practiced, and with success, in a certain percentage of the cases. In preaseptic days it may have

17. Progrès méd., November, 1885.
18. Eine neue Methode des Cataract Operation, Berlin, 1872.
19. Der Hohlschnitt, Vienna, 1873, p. 23.
20. Graefe's Arch., 1874, xv, No. 3, 294.
1880, Inaug. Diss., Zurich, 1882.
21. Muralt: Die Starextraction d. oph. Klinik in Zurich, 1870-
22. Ann. d'oculistique, lxxv, p. 264, 1875.
23. Klin. Monatsb. f. Augenheilk., November and December, 1903.
24. System of Diseases of the Eye, Norris and Oliver, iii, 798.
25. Lehrbuch d. Augenheilk., Achte Auf., 832.
26. Diseases of the Eye, Fourth Edition, p. 707.

possessed some merit, as the danger from infection was probably less.

Sir James Earle[27] removed cataract by an incision in the sclera. The incision was made through sclera, chorioid and retina, in some cases parallel with the margin of the cornea (equatorially), in other cases at right angles with the margin of the cornea (meridianly), the incision being five lines in length. By means of forceps the lens was seized from behind and drawn through the wound.

Quadri[28] reported the removal of cataract through the sclera in 25 cases, 11 of which were successful.

DESIRABLE FEATURES OF THE INCISION.

1. It must be large enough to permit the lens to escape readily. If a linear incision or an incision approaching the linear incision is made the length of the incision should be from 10.5 to 12 mm. If a flap incision is employed it should include almost two-fifths of the circumference of the cornea for a moderately large cataract if an iridectomy is to be made, and a little more than two-fifths of the circumference of the cornea if a simple extraction is contemplated.

2. The incision should be placed where the healing of the wound will be rapid. While incisions that lie wholly or in part in the cornea are permissible in young individuals whose nutritive processes are vigorous, it is not desirable to place the wound in clear cornea in the aged or feeble, because of the danger of imperfect and retarded healing. In all such the incision should lie in the limbus or a very little back of the limbus, where the nutrition necessary to promote healing can be supplied directly and abundantly.

3. The incision should be placed so that the field of operation will not be too greatly interfered with by hemorrhage. By the aid of suprarenal extracts, hemorrhage from the small vessels at the limbus can be quite readily controlled.

4. The incision should not lie too close to the ciliary body. It would seem that the region of the limbus is the most desirable location.

In the opinion of the writer a desirable section is one located in the limbus, including about two-fifths of the circumference of the cornea, directed upward and terminating with a small conjunctival flap (Fig. 24).

POSITION OF THE PATIENT.

Whether the patient is in the sitting or prone position during the operation, the head should be so placed that the vertical transverse plane of the head dips 15 or 20 degree from the horizontal at its lower part (the chin lower than the forehead). This is attained in the chair by the position of the headrest. When the patient lies on the operating table or bed, suitable pillows are employed. Operators in the United States prefer, as a rule, to stand behind the patient while making the incision for both eyes, using the right hand for the right, the left hand for the left eye. The ability to do this is soon acquired whether the surgeon is ordinarily ambidextrous or not. If it is impossible to use the left hand for making the incision, it becomes necessary to stand or sit in front of the patient while making the incision in the left eye, when the surgeon must cut away from himself. The height of the patient's head should be so regulated that the surgeon's hands and arms will not be in a cramped position.

27. Account of a New Mode of Operating for the Removal of Cataract, London, 1801, reported by Mackenzie.

28. Annotozioni, Prat. suelle Malattie degli Occhi, iii, 107, Naples, 1827.

PUNCTURE.

The puncture should be made with the long axis of the knife almost at right angles to the surface at the limbus, and the direction should be changed so that the plane of the blade is in the plane of the base of the cornea as soon as the point has penetrated into the anterior chamber. If continued further the iris will become engaged, when the knife must be withdrawn until it is free from the iris. If much aqueous is lost by this maneuver the operation should be postponed until the anterior chamber is restored. If the point of the knife enters the tissue of the cornea at too great an angle it may pass for some distance in the lamellæ of the cornea, and in extreme cases may fail to enter the anterior chamber. Complications of this nature are especially apt to occur if the blade of the knife at and just back of the point is too flexible. The error may be readily corrected by withdrawing the knife and commencing again.

If, in passing the knife across the anterior chamber, the iris is engaged, the knife should be withdrawn sufficiently to free the point. If much aqueous is lost the knife may be entirely withdrawn, the operation may be postponed or the incision may be completed with the scissors or blunt-pointed knife.

COUNTER-PUNCTURE.

The point of the knife should be advanced across the anterior chamber, the plane of the knife corresponding with the plane of the base of the cornea, and the counter-puncture should be made at a point exactly corresponding to the puncture.

ERRORS.

(*a*) The point may be carried too far forward and emerge in clear cornea. This error is of little importance if it is not more than 1 or 2 mm. out of the way. The incision may be completed. (*b*) The point of the knife may be carried too far backward. This is a frequent error with beginners. If the iris or ciliary body is not engaged the section may be completed. If either is engaged, it is better to withdraw the knife and make a better counter-puncture, if little or no aqueous has escaped, and complete the section or withdraw the knife entirely and postpone the operation. (*c*) If a knife with a flexible point is used, the fibrous coat may be pierced very diagonally and the point emerge far back in the sclera. If the error is extreme the knife should be withdrawn and the operation postponed. (*d*) The knife may be entered with the back upward. If the blade of the knife is not too wide, this error may be corrected by quickly rotating the knife on its long axis, the sharp edge being turned toward the surface of the cornea; this is done to avoid engaging the iris on the edge of the knife. The incision may then be completed. If the knife is too broad for this maneuver, it may be withdrawn, the incision completed with the scissors, or the operation may be postponed until the anterior chamber is again restored.

The incision should be completed by long to-and-fro sweeps of the knife made rather rapidly at first, completing the section slowly; but little traction should be made on the cornea. Forward or backward pressure with the knife should be avoided. As the knife leaves the fibrous coat, the conjunctiva will be raised on its edge and a conjunctival flap of the desired length, from 2 to 3 mm., may be made.

ACCIDENTS.

(*a*) The iris may fall before the knife when the section is being completed. Injury to this membrane may sometimes be avoided by cutting corneal tissue with the

toe of the knife on the thrust and with the heel of the knife on the draw without changing the direction of the incision. De Wenzel advises rubbing the surface of the cornea as the incision is being made to prevent cutting the iris in cases in which the iris falls before the knife. If these measures fail it is well to proceed with the section, removing the cut portion of the iris after the section is completed, and doing a more complete iridectomy subsequently if desirable. (*b*) The tissues of the lids and caruncle should not be pierced by the knife. Untoward movements on the part of the patient are apt to be induced by such interference.

The healing of a section as described is rapid and satisfactory. He who finishes his incisions in clear cornea in old individuals will sooner or later come to grief on account of long-delayed healing with gaping of the wound or from suppuration because of the low vitality of the corneal flap.

THE CONJUNCTIVAL FLAP.

Many operators who have carried the incision within the domain of the conjunctiva have studied the conjunctival flap. Von Graefe[29] experimented extensively with it. He made a series of 100 extractions with large conjunctival flaps and a similar series with short flaps. He concluded: 1, When the wound is fully covered by a conjunctival flap the healing is most rapid; 2, small differences in the height of the flap are of no importance; 3, the flap should not be too large, as the hemorrhage will then be profuse and the blood may enter the anterior chamber and cloud the field of operation. The

Fig. 16.—Liebreich's incision

Fig. 17.—Ed. de Jaeger's incision.

Fig. 18.—Horner's incision after Muralt.

subconjunctival tissue may also become infiltrated, producing undesirable conditions.

Horner[21] always made a conjunctival flap of greater or lesser dimensions.

In my opinion a conjunctival flap is of great value, especially in old individuals and in patients who are restless. I prefer a flap from 2.5 to 3.5 mm. wide and and from one-half to two-thirds of the length of the incision at its middle. The conjunctival flap should be turned forward immediately after the incision is finished. The bleeding from such a flap, which, without the use of adrenalin, would be somewhat profuse and might to some extent interfere with the subsequent steps of the operation, is almost completely controlled by the local use of this remedy instilled into the eye a few minutes before the operation is begun. After extraction of the cataract and the reposition of the iris, the conjunctival flap should be restored to its former position by means of a spatula. A suture may easily be introduced to retain the conjunctival flap in position if it is thought to be desirable. In my experience this is seldom necessary.

IRIDECTOMY.

Iridectomy at the time of the extraction of cataract is not of recent date. Daviel, about 1750, practiced it more or less extensively. If, in the course of the operation for extraction, the iris prolapsed, he did not hesitate to excise the prolapsed portion. If the sphincter

29. Graefe's Arch., xii, No. 1, 162.

was so rigid that it interfered with the free escape of the lens, he divided it with the scissors (iridotomy).

De Wenzel (1788) performed iridectomy at the time of the extraction in some cases. At times this operator excised a portion of the periphery of the iris, leaving the sphincter intact, extracting the cataract through the opening thus made.

Operators, such as von Graefe, A. Weber and E. von Jaeger, who extracted cataract by linear incisions situated partly or wholly in the sclera, performed iridectomy as a routine measure. Those who made the extraction by means of a pronounced flap—Daviel, Richter, Guthrie, Panas and others—and those who made the incisions in the cornea wholly or nearly so—Wardrop, Steffan, Kuchler, Liebreich and others—performed iridectomy but seldom.

Critchett and Bowman performed iridectomy as a routine measure. Mooren (1862) did preliminary iridectomy some weeks before the extraction.

With the development of the knowledge of the causes of infection and the departure from the linear incision of von Graefe, the performance of iridectomy became less frequent. The operation of extraction without iridectomy was advocated by Bettremieux,[30] Abadie,[31] Panas,[32] Schweiger,[33] Knapp[34] and others.

For a number of years after the return of the operation of the extraction of cataract without iridectomy, the "simple operation," as it was styled, was much in vogue, some operators employing it almost to the exclu-

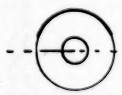

Fig. 19.—De Wecher's incision.

Fig. 20.—Snellen's incision.

Fig. 21.—Modifications.

sion of extraction with iridectomy (the "combined operation").

Within the last few years a reaction has set in. Some of those who were very enthusiastic regarding the "simple extraction," because of the annoyance and trouble both to the patient and operator entailed by prolapse of iris; also because of the difficulty of freeing the eye of cortical lens substance, and the more frequent occurrence of glaucoma after the "simple operation," are now doing the "combined operation" more frequently. It is a well-recognized fact that the visual results by the one method are as good as by the other, and, since success with as little annoyance to the patient and a minimum of anxiety on the part of the operator are after all the objects to be obtained, it is best to choose the safer course in all cases.

While it is permissible to do the "simple operation" in young tractable subjects who have no history of rheumatism and gout, whose intraocular tension is not above the normal, whose irides are not atrophic and react readily, and whose lenses are not swollen, it is risky, to say the least, to do the "simple operation" in very old individuals with the gouty or rheumatic diathesis, whose blood vessels are atheromatous, intraocular tension increased, irides sluggish, lenses swollen, cataract hyper-

30. Arch. d'ophth., 1885, p. 508.
31. Ann. d'ocul., 1886, p. 257.
32. Arch. d'ophth., 1885, p. 289.
33. Arch. of Ophth., xviii, 1887, s. 143.
34. Arch. of Ophth., xvi, 1887, p. 45.

mature, apt to be restless, chronic bronchial affection, asthmatic, etc.

The question of preliminary iridectomy is one on which different operators have widely different views. Theoretically, it is safer to perform iridectomy when the "combined operation" is chosen preliminary to the extraction of the cataract. I have no doubt that nearly all surgeons do preliminary iridectomy in certain cases of immature cataract in which it is desirable to expose clear lens at the periphery to afford better vision until the cataract reaches a suitable stage for removal, or in cases in which it is designed to hasten the opacification of the lens; also in cases in which the extraction is expected to present unusual difficulties, and in cases in which the patient has lost the vision of one eye.

I confess that I have not found the advantages in preliminary iridectomy to be all that the theoretical consideration of the subject has led me to expect. The ultimate results have not been sufficiently advantageous to induce me to extend greatly the application of this operation. In all cases in which there is no special indication for preliminary iridectomy, if the combined operation is decided on, the iridectomy immediately precedes the capsulotomy. An exhaustive discussion of this subject is purposely omitted.

IRIDECTOMY AT THE TIME OF THE EXTRACTION.

After the incision is made, the iris may prolapse into the wound, which condition is apt to occur if the aqueous humor escapes with a gush as the incision is finished, or it may retain its normal position, particularly when the

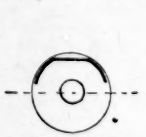

Fig. 22.—"Shoulder" incision.

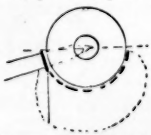

Fig. 23.—Czermak's incision.

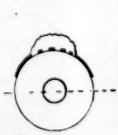

Fig. 24.—Incision practiced by the writer.

aqueous is made to escape slowly. When a complete coloboma is contemplated, it is desirable to grasp the iris near the pupillary margin (the style of iris forceps is of no particular importance). The iris is then drawn gently out of the wound, and when the part seized is well out of the eye it is cut off close to the globe by one snip of the scissors.

Shall the iris be excised by cutting it in the plane of the iris or at right angles to this plane? (In the line of the incision or at right angles to the line of the incision?) If there is a conjunctival flap it is difficult to excise the piece of iris by cutting at right angles to its plane without engaging and excising part of the conjunctival flap. For this reason, it is better when a conjunctival flap has been made to excise the iris in the direction of its plane. If no conjunctival flap is present it makes no difference which procedure is chosen. The amount of iris excised can be regulated to suit the surgeon, whether he chooses one or the other method. It is thought that the columns of the coloboma are less liable to become engaged in the angles of the wound if the iris is excised at right angles with the course of the incision, but in reality there is little in this contention, particularly if the piece of iris is excised at one snip.

Should a large or a small part of the iris be excised? This is really of little importance aside from the question of appearance, provided the columns of the coloboma remain free from the wound. If the incision approaches the "linear" and extends into the sclera, the iridectomy should be large to provide against incarceration or prolapse of the iris; if in the limbus or in the cornea, the size of the iridectomy may be small without great risk of its becoming permanently engaged in the wound; if upward, it makes little difference whether the iridectomy be large or small, so far as the visual results are concerned. A small iridectomy gives a somewhat better cosmetic effect. Whether much or little of the sphincter iridis is removed is of small importance. If the iridectomy is small and but little of the pupillary margin of the iris removed, the amount of light entering the eye may be better controlled; however, it seldom happens that aphakic patients suffer from inability to control the amount of light that enters the eye, whatever the size of the iridectomy. The operator should free the wound from all incarceration of iris at the proper time of the operation, with the greatest care, using the spatula for this purpose.

COMPLICATIONS.

It sometimes happens that the iris is not readily grasped with the ordinary iris forceps. This is particularly apt to be the case if the iridectomy is not decided on until after the lens has been removed. Should this difficulty be experienced we may succeed by using forceps with the teeth placed on the lower edge of the blades near the tip of the blades, as in the Mathieu, the Smith, and the Knapp capsule forceps. If these do not succeed, the blunt or sharp-pointed Tyrell hook may be employed. If, after the lens has escaped, the pupillary margin of the iris above recedes beneath the ciliary body (folds under), it is best not to attempt its removal.

If there has been an iritis and the iris is attached to the capsule of a cataractous lens, the ordinary iris forceps may not suffice to grasp the iris securely enough to bring it out of the wound. Strong forceps with teeth on the lower edge should be used in such cases.

ACCIDENTS.

(*a*) In drawing the iris from the anterior chamber the traction may be too great and the iris be partly or wholly torn from its attachment to the ciliary body (iridodialysis). If partial iridodialysis is produced the portion of the iris withdrawn from the eye should be excised. The iris that remains in the globe, even if detached from the ciliary body for a short distance, will give no trouble. After complete iridodialysis the patient will be annoyed by excess of light, but fair vision may be retained. (*b*) The capsule of the lens may be seized on attempting to seize the iris. This accident is of no particular importance.

Various forms of iridectomy and iridotomy have been employed by different operators from time to time with a view of simplifying the operation of extraction and of saving more of the iris. Daviel cut the iris from pupillary margin to the insertion of the iris (iridotomy) from time to time. Galezowski advocated iridotomy as a routine procedure.

Manolescu also divides the iris radially after having drawn it out of the eye. This, of course, subjects the iris to more or less bruising.

Chandler[35] advocates excising a piece of the iris near its insertion just after the lens has been removed in cataract extraction. The piece of iris removed is as nearly as possible 1 mm. in diameter. Operation is as follows: After the lens has been removed, before the cortical substance is removed, the iris is seized near

35. Arch. of Ophth., xxxiii, No. 1, 1.

its insertion by means of delicate forceps with the teeth placed at the ends of the blades. The seized portion of the iris is withdrawn from the wound and snipped off by means of thin-bladed scissors. Through the opening thus made, retained cortical lens substance is permitted to escape. The operation is termed the "modified simple" extraction. The operation was devised to avoid prolapse of the iris after simple extraction. Chandler reports 312 cases with 4 prolapses, 2 of which were the result of violence after the anterior chamber had been restored. Since the average of prolapse in simple extraction by good operators is approximately 6 per cent., the reduction by this method is very satisfactory.

THE DELIVERY OF THE LENS FOR THE EXTRACTION OF CATARACT; IRRIGATION OF THE ANTERIOR CHAMBER, AND THE FIRST TOILET OF THE WOUND.*

L. WEBSTER FOX, A.M., M.D.
PHILADELPHIA.

The second stage toward the successful completion in cataract operations depends, first, on the length and character of the corneal incision; second, on the laceration of the capsule or the removal of the lens within its capsule through the opening in the cornea. The importance of the amplitude of the incision is so well known to all ophthalmic surgeons that, in his symposium, Dr. Weeks has undertaken to embellish this part of our subject with the care and precision which characterize all his writings on ophthalmology. Dr. E. E. Landolt of Paris has recently written an historical review of all the work done on this subject in a monograph of 130 pages.[1] So, with Dr. Weeks on this side of the Atlantic and Dr. Landolt on the other, the ophthalmic world will be made thoroughly conversant with all that can be said or written on that delicate incision in the cornea, so important to the success of a cataract operation.

To carry out the mechanical and geometrical incision properly entails close study, for there is no operation in surgery so dependent on the cunning of the hand and its delicate training as this. Each cataract case is a law unto itself, and the operator who does not recognize immediately the necessity for a different kind of incision in patient A from that required in patient B has much to learn. No two eyes are alike; therefore, no two incisions can be mathematically the same in cornea with varying geometrical areas.

With the proper incision we advance to the second stage of the operation. Shall it be with an iridectomy or without? My experience leads me to believe that if we were to operate alternately on a series of cases we would obtain far better ultimate results in at least 75 per cent. of the cases in which an iridectomy is performed, than in those in which the simple method is carried out. I have had my share of successful results by the simple method, but they have always been in selected cases.

IRIDECTOMY.

The iris may or may not present itself at the apex of the wound after the incision. It usually bulges forward, but may be replaced by gentle pressure with a Daviel spoon. It is then grasped with the proper iris forceps, drawn gently forward, and with one snip of the scissors is cut off close to its base. This gives the ideal keyhole iridectomy, and a space large enough for the escape of the lens without bruising the pillars of the iris, thus avoiding the complication of iritis, which is so apt to follow. In the simple operation, the hardened lens has to be forced through a space much smaller than its own diameter. This means an unusual stretching of the circular fibers of the iris; a partial paralysis is the result, which even eserin fails to hold in contraction, and is followed probably by incarceration in the lips of the wound. The currents of the fluids of the eye which flow from the wound are strongest at its apex and sweep the iris into this space like a floating flag, while the wound

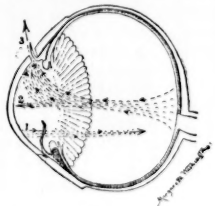

Fig. 1.—Currents of the eye, the results of pressure: 1. Showing primal pressure toward the optic nerve. 2. Currents returning, due to counter pressure. 3. Exit through corneal incision and floating iris.

heals from its base toward the center. So long as there is the most minute opening, the currents of the eye flow rapidly or slowly according to the intraocular pressure, thus keeping the iris constantly in the gaping wound until closure takes place. In many examinations of the iris, I have found that its pupillary margin projects forward, and when this iris is bruised or stretched to the point of paralysis, it can be easily understood how the currents of the eye can sweep this floating tissue into the fissure of the incision. With this explanation it is readily understood why so few simple operations have the beautiful round pupil and the iris in its proper

Fig. 2.—Incarceration of the iris due to paralysis of the circular fibers in simple operation.

place. The successful cases of simple cataract operations are those in which the cornea is larger and the anterior chamber is deeper than usual and the iris appears to hang perpendicularly (from its base). With all such conditions confronting one, it is not difficult to understand why, in the hands of the larger number of operators, an iridectomy is preferable.

HISTORY OF THE OPERATION BY EXTRACTION AND THE INSTRUMENTS DEVISED FOR OPENING THE CAPSULE.

To Daviel, a French surgeon, we are indebted for the operation for removing cataract by extraction as a routine practice. He performed this operation in 1747,

*Read in the Section on Ophthalmology of the American Medical Association at the Fifty-eighth Annual Session, held at Atlantic City, June, 1907.

1. La Surface de Section des Plaies Faites en vue de L'Extraction de la Cataracte et de L'Iridectomie, 1905.

although it was not a new discovery, for Rhazas, in 1529, says that "about the end of the first century Antyllus opened the cornea and drew the cataract out of the eye with a fine needle or hook," in which practice he was followed by Lathyrion.[2] If history is correct, this operation was forgotten or neglected until St. Yves (1707) performed the operation of extraction and described the operation in the following words:

When the operation of removing the cataract, which has passed into the anterior chamber, is to be performed, the patient must be seated on a chair, with the eye fairly opposed to the light; the lids are to be kept open with the thumb and forefinger of the right hand, the cornea is opened with a fine cutting lancet, commencing a little below the level of the pupil and continuing it across to the opposite edge, so as to leave only half a line on each side of the lower half of the cornea undivided. Through this opening a fine curette is to be introduced; and, by passing it behind the crystalline, its extraction is to be accomplished.

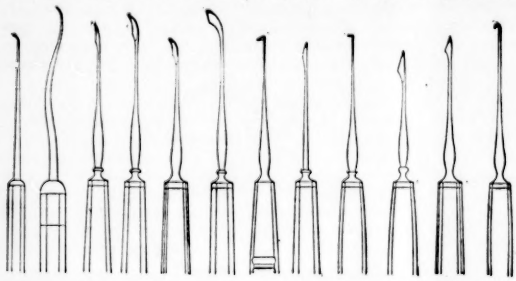

Fig. 3.—Cystitomes as used by: 1, Freytag; 2, Baron Wenzel; 3, Langenbeck; 4, Rosas; 5, Boyer; 6, Ritterich; 7, von Graefe; 8, Wardrop; 9, Arlt; 10, Desmarres; 11, Cusco; 12, Becker.

In 1708, Petit performed an extraction by the same method. Freytag (1721) also resorted to extraction through the cornea with a "hooked needle." The work of St. Yves and Petit led Daviel to follow the same method and he evidently made some improvements in the instruments of his day for the successful delivery of the cataract, for he speaks of using a small spatula (flat needle) with which he drew out from behind the pupil the different portions of the lens. Plantner (1780) speaks of extracting the lens through the corneal wound either with forceps or a little hook. From Daviel's time to the present many instruments have been devised for opening the capsule and delivering the lens, and the end is not yet. From various sources I have succeeded in gathering together almost every form of cystitome in use from Freytag, No. 1 (1721), down to the latest model of to-day. From the variety of these models, operators of 150 and more years ago were quite as ambitious to suit their own individual methods and to be remembered by these instruments as are the surgeons of to-day.

OPENING OF THE CAPSULE.

Many of the older operators removed the speculum after making the incision, and have the lids separated by the fingers of a trained assistant, or, raised by lid elevators so as to remove all pressure from the eyeball, and the same method is followed by some operators to-day. In my own practice I have rarely found this necessary. The speculum of Clark, from its shape and balance, seldom produces pressure on the globe heavy enough to press forward the vitreous; therefore, I dispense with an assistant.

Which cystitome is the best? I have tried nearly all the models used to-day, and each and every one has its advantage and disadvantage. The hooked needle and small sickle-shaped cystitomes of the older surgeons were introduced into the anterior chamber through the incision of the cornea with the concavity turned upward till the point is opposite the pupil. The point was turned inward and through the capsule, then drawn from side to side, and, freely dividing that membrane, it was carefully withdrawn with the convexity of the instrument downward.

While attending the clinics of Arlt in Vienna, I found he used a hook (Figs. 3, 9) with which he made a triangular flap in the capsule; Jaeger always very successfully used the right-angled cystitome (Figs. 4, 15), while Mauthner preferred the flexible cystitome of von Graefe (Figs. 3, 7). The cystitome of Jaeger appealed to me as one of the safest, as well as the most mechanically perfect in shape and less liable to become engaged in the iris, so it is the one that I have used in many cases. The instrument is passed into the anterior chamber, gently pressed against the cornea on the nasal side until it reaches the pupillary margin of the iris below, slightly turned backward and hooked into the capsule—not too deeply—then drawn upward toward the top, lacerating the capsule in its upward movement. It is again passed downward through this same opening, passing across horizontally until the iris boundary is again reached, a second vertical tear is made to the top across to the first incision. In this way a rectangular opening of a large size is made in the anterior

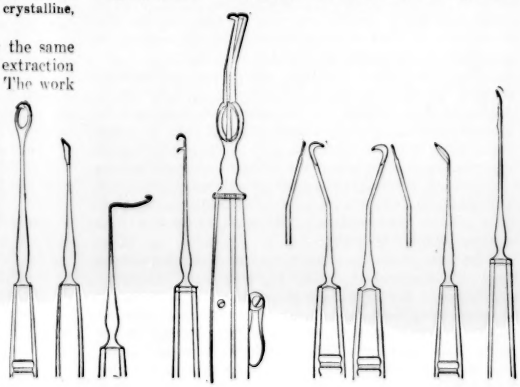

Fig. 4.—Cystitomes as used by: 13, Bettremieux; 14, Knapp; 15, Jaeger; 16, Weber; 17, Meyer; 18, Landolt, right and left; 19, Ziegler; 20 Galezowsky.

2. Guthrie: Lectures on Operative Surgery, London, 1823, p. 290.

capsule. Meyer attempted this same operation with the double cystitome invented by himself (Fig. 4, 17). This instrument is introduced in the ordinary way into the anterior chamber; on arriving at the inferior margin of the pupil, by pressing a lever, the cystitome becomes double; and, on drawing it back toward the corneal margin, a large central opening is made in the capsule. Before withdrawing it from the wound it is closed and this brings out the capsular flap. This instrument never became very popular, and now with many others is only an ophthalmic curiosity. While in Heidelberg I saw Becker use a cystitome (Fig. 3, 12) which bears his name and he used it most successfully. Weber (Fig. 4, 16) improved this instrument by devising a double hook, the fine teeth of which are placed one beneath the other. "He moves it in the capsule from one side of the pupil to the other and from the two angles of the capsular wound toward the incision in the cornea. If the capsular flap remains attached to the hook it is snipped off with the scissors." Geyet proposed to open the capsule near its superior borders by slight pressure. He tilts the margin of the lens into the corneal wound and then opens it with a small linear knife. Trousseau and some other dexterous surgeons pass the point of the knife through the capsule in making the corneal incision. This is not so difficult as would appear at first sight. It is done in the following way: Point the knife toward the tip of the nose, and, as soon as the instrument has entered the anterior chamber, pass the iris, dip the point of the blade into the capsule, then throw the handle backward and downward; this raises the point of the knife, lacerating the capsule and making the counter puncture in the cornea. Knapp (Fig. 4, 14) also adopted the peripheral incision with a cutting cystitome, and by his teaching both his instrument and method have been extensively followed. This cystitome is very similar to that used by Boyer (Fig. 3, 5), who lived during the eighteenth century. Landolt (Fig. 4, 18) has devised a right- and left-hand cystitome adapted for each eye, but at convenient angles to be inserted in the anterior chamber. Ziegler (Fig. 4, 19) has devised a lance-shaped cystitome which I have found extremely useful in making a large cut in a thickened capsule. The flexible cystitome of to-day (Fig. 3, 7) with its small-cutting lance-shaped blade was used by each and every surgeon at Moorfields in London during my term of service there, and it is probably used by more ophthalmic surgeons than is any other form. De Wecker (Fig. 5, 1), Foster (Fig. 5, 2), Collins (Fig. 5, 3), Liebreich (Fig. 5, 4) have substituted capsular forceps specially devised for grasping and extracting as much of the anterior capsule as possible. This method of opening the capsule requires great delicacy of touch and immobility of the eye. It is not my province nor wish to speak about the merits and demerits of each and every one of the many cystitomes made; I have only mentioned a few which I have found the most mechanically perfect and best adapted to lacerating the capsule.

After the capsule has been opened by any one of the instruments described, cystitomes or forceps, the next stage is the delivery of the lens. Pressure on the lower half of the cornea and gentle pressure against the upper lip of the incision causes the eye currents to move backward in the lower half of the eye and forward in the upper half of the globe in direct ratio to this pressure and counter-pressure. The lens (Fig. 6) is thus made to tilt forward on its equatorial axis and by continued gentle pressure below it is forced forward and upward with the currents finding their way through the incision, and thus the cataract is gently expressed. If the pressure is too great, caused by the heavy hand of the operator, or a spasm of the muscles of the globe or eyelids, the lens is forcibly expelled and a gush of vitreous is sure to follow. The latter result was experienced during an operation for extraction, performed before the senior class in the amphitheater of the Medico-Chirurgical College. The eye had been thoroughly anesthetized and the patient was passive, yet, when the incision was made, an involuntary spasm of the orbicularis muscle took place forceful enough to close a Clark stop speculum. The force exerted was so great that the lens was thrown above my head and fell on the floor some distance from the patient. In another case the force exerted was not so great and the lens did not fly more than six inches from the eyeball. Some operators use the fixation forceps as a means of exerting counter-pressure, but any one thinking for a moment of the effect and counter-effect of this force on the fluids of the eye must at once realize the cause of many failures in expelling the lens. This is explained (Figs. 1 and 2), first, as to the effect of pressure on the lower third of the eye; second, the cause of a one-sided prolapse of the iris when the pressure is not properly exerted on the eyeball directly in the median line.

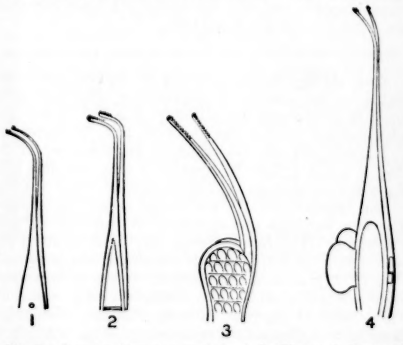

Fig. 5.—Capsular forceps as used by: 1, De Wecker, 2, Foster; 3, Collins; 4, Liebreich.

THE REMOVAL OF CORTICAL SUBSTANCE.

Is it deleterious to allow cortical substance to remain? I think it is to a certain extent. My observation has been that the posterior capsule always grows denser, and, in consequence, is more obstructive to vision when the tenacious lenticular masses are allowed to remain in the anterior chamber. I use massage first, and the Daviel curette second, then follow this by irrigation, if I have not cleared the anterior chamber sufficiently by the two methods mentioned. As soon as the cataract has been expressed the speculum is removed. Pressure is then brought to bear against the upper eyelid with the thumb of the left hand as a fixed point, and with the tip of the little finger of the right hand, the lower lid is gently pressed against the lower third of the cornea. Then, with an upward movement through the medium of the lids, all extraneous matter possible is forced out through the lips of the wound. This action usually cleanses the anterior chamber, leaving the pupil a velvet black and the iris in its proper position. Sometimes

with this massage it is not always possible to clear the pupillary space nor the anterior chamber from all cortical substance; the curette is then called into use.

The curette has a limited field and removes only such particles that lie in the pupillary area, it being unsafe to pass the curette behind the iris and into the folds of the posterior capsule. Massage and the curette are only safe in the combined operation; the latter is not applicable in the simple operation. If I find that the pupillary space is black and the pillars of the iris stand out clear I let well enough alone and close the eye; but, if the anterior chamber presents a hazy appearance, I resort to irrigation with a physiologic salt solution—the mercuric salts or distilled water should *not* be used, as both have a deleterious effect on the endothelium of the anterior chamber. I have in my possession various irrigators—McKeown's, Lippincott's, Elliott's and the simple pipette of Terson. The most practical and safest is McKeown's, for with this instrument the fluid reaches every part of the interior of the capsule and forces out with the current all extraneous material and the cornea assumes its normal convexity.

I am firmly convinced, however, that the fewer instruments placed in the anterior chamber the better, but when necessity compels, the methods I have suggested are, I believe, the safest and best.

EXTRACTION OF THE CATARACT WITHIN THE CAPSULE.

From incomplete knowledge of the earliest operations, and from the models of instruments that have come down to us through the centuries, it is safe to say that whenever the cataract was displaced, first, by depression, and second, through the cornea, it was taken out of the line of vision within its capsule. I shall not deal with the couching method, but simply mention the extraction of the cataract through the cornea within its capsule. The first surgeons who succeeded by this method were Freytag (1721), Janin, Heckel and Richter, about the year 1773. A little later Mohrenheim, and especially Beer (1799), advised this method. It was again revised by Christiaen (1845), who strongly recommended it. Then followed Sperino, Gioppi, Feneglio, Gradenigo, Rosmini and Alexander Pagenstecher. The latter, from 1865 to 1875, performed 353 operations, and his work was given to the world in an article published by Dr. Hermann Pagenstecher, his brother, in 1877.

Delgado of Madrid attempted to extract the cataract in its capsule in the following manner:

> He begins by introducing into the anterior chamber, as in discission per corneam, an instrument combining the needle with a spatula; with this he detaches the lens and makes it mobile by gentle pressure on the periphery of the cataract. Having done so, he withdraws the instrument, waits until the aqueous has again filled the anterior chamber, and then extracts the lens in its capsule, using von Graefe's peripheral incision and the superior iridectomy.

From the days of Pagenstecher and Delgado until the present day many operators have had cases in which, owing to a thickened capsule and atrophy of the suspensory ligament (zonule of Zinn), they have delivered the cataract within its capsule without difficulty. Encouraged by this, they have operated on patients in whom these conditions did not exist and have not met with the same brilliant results.

For several years past, whenever I have found a hardened cataract with a thickened capsule and atrophied suspensory ligament, I have dislocated the lens with a Jaeger's cystitome (Fig. 4, 15) and then extracted the lens within its capsule. My method is as follows: Passing the instrument into the anterior chamber and hooking the lens at its inferior margin I make a backward pass, at the same time pressing the upper lip of the incision very gently downward and backward; this tilts the upper part of the lens forward; the lens is then brought back into its normal position, and this is followed by rotation on its axis, done by hooking the cystitome in the capsule. Then, removing the cystitome and by counter pressure on the lower third of the cornea with a tortoise shell spatula, I express the cataract through the incision without loss of vitreous. During the last five years I have operated on at least fifty patients by this method, and I find it preferable to the method advised by those operators who express the lens within its capsule by pressure. In the last ten cases, in which I followed the method suggested by Pagenstecher, Smith, etc., I have found considerable excitation of the iris, more or less pronounced irritability in healing, the eyeball remaining red, and there is also much distortion of the iris. Among the Anglo-Saxon race I am certainly not in favor of the operation of extracting the lens within its capsule as a routine method. Even in those cases in which I have delivered the lens within its capsule and in which the suspensory ligament was atrophied and no secondary inflammation followed, the average visual acuity obtained was no better than in those cases in which the ordinary operation was performed.

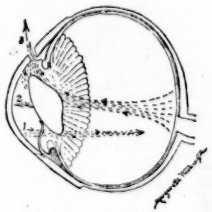

Fig. 6.—Demonstrating the forces which expel the crystalline lens: 1. Primal pressure with spatula on cornea. 2. Currents returning, tilting lens. 3. Exit of crystalline lens through corneal incision.

I have stated that the openings of the capsule are many and varied, and so are the instruments to make these openings. Each cataract is surrounded by a pathologic capsule. This change may be invisible to the naked eye, or very much thickened and dense and easily detected by oblique illumination, and yet it is very difficult to recognize the different types. Diaphanoscopy does not help us, oblique illumination may in some cases, but it is not to be relied on. I have found that the age of the cataract and the senility of the individual are the best guides. A cataract of one year's growth has a capsule with a bluish cast; a cataract of two years' growth has a capsule with a pale color, moderately dense in appearance; a cataract of three years' growth and over, has a capsule of yellow cast, and is dense and inelastic. As the cataract matures the capsule thickens, while the zonule of Zinn, or suspensory ligament, grows thinner or degenerates. I have found this classification of cataracts on the whole fairly accurate.

DISLOCATION AND MALPOSITION OF THE LENS.

Occasionally a dislocation of the lens occurs when the corneal incision is made or when the incision is not long enough and too much pressure is exerted in the center instead of in the lower third of the cornea, forcing the

lens backward instead of tilting it forward. Sometimes a prolapse of vitreous takes place after the incision of the iris or after the laceration of the capsule. This is an evidence of a rupture of the zonule of Zinn and a partial dislocation of the lens. The speculum should be removed at once, the patient allowed to rest quietly for a few minutes, the eyelids then separated by a trustworthy assistant and the lens immediately extracted by means of a scoop (Waldau "Schuft," Critchett's, Bowman's or Levis's). If there is much loss of vitreous and the eyeball becomes flaccid, the eyelids are separated and the eyeball, through the anterior chamber, is filled with a tepid physiologic salt solution.

ECTOPIA LENTIS.

In rare instances we meet with a congenital displacement of the crystalline lens upward or downward to the nasal or temporal side. When we meet with cataracts of this character it would be unwise or dangerous to make a corneal incision and attempt to extract the lens through the opening with a scoop; the vitreous is fluid and would certainly escape in large quantities, causing a total collapse of the eyeball and consequent loss of vision. In such cases it is safer to follow the couching method, for it is almost impossible to extract the cataract by the ordinary method and at the same time preserve the integrity of the eyeball.

LENS IN ANTERIOR CHAMBER.

The crystalline lens may find lodgement in the anterior chamber and cause an irritation to the iris and ciliary body. I have found that when the dislocated lens remains in the anterior chamber for more than a year it solidifies and becomes a calcareous mass without an increase or loss in its size. It then becomes a serious menace to the eye by causing iritis or iridocyclitis, but the greater danger lies in its provoking sympathetic ophthalmia. To remove this foreign body I make an incision through the horizontal plane of the cornea. The puncture is made near the outer side of the cornea directly into the anterior chamber, the point of the knife is passed along until the foreign body is approached, then the point of the blade is passed over it and beyond to the point of counter puncture, thus making a long incision through the center of the cornea. The speculum is then removed and the anterior chamber opened by pressing the partially closed eyelids with the thumbs of the right and left hand. If the calcified lens can not be forced out in this manner a small hook may be passed through the incision back of the lens while the pressure is maintained with the thumb of the right hand above and the lens then drawn out. By this method I have successfully removed the lens in five cases.

LOSS OF VITREOUS.

Is the loss of vitreous, in large and small quantities, detrimental to the success of the operation? The surgeon of to-day looks on the loss of vitreous with great seriousness and aims to prevent it at all hazards. Some of the older authorities did not take the loss of vitreous with much distrust, for Lawrence says:

> The escape of vitreous humor is not to be regarded in itself as a very serious circumstance. The space which it before occupied is filled by aqueous secretion. There is no doubt that one-fourth or one-third, and perhaps even one-half, of the vitreous humor may be lost in this way without interfering with the result of the operation. In many instances it seems rather to contribute to success; it lessens the bulk of the globe, and thus prevents the tension which occasionally succeeds the operation. Sometimes there is a spasmodic action of the muscles, propelling the vitreous humor against the cornea and preventing the apposition of the flap. I have in such cases introduced the curette through the pupil and let out some of the vitreous humor purposely.

In my opinion it should be our aim to deliver the lens without loss of vitreous. I have had a few cases in which at least one-fourth of the vitreous was lost, but instead of allowing the globe to remain in the flaccid condition, which this loss of vitreous would entail, I have immediately filled the eyeball with a tepid saline solution (physiologic salt solution) and have had good recovery ensue. When this has not been done and the condition has been left to Nature, subacute glaucoma has almost invariably followed. It is only fair to state, however, that in these cases the tension was slightly above normal before operating and that glaucoma, in an insidious form, may have already existed. For a trifling loss of vitreous no heed need be paid other than a careful snipping of this bead from the lips of the wound and a gentle backward stroking of the edges of the incision. If at the end of twenty-four hours there be again a protrusion of vitreous it should be cut off and the lips of the wound touched with a 1 per cent. solution (5 grains to the ounce) of silver nitrate. When the vitreous humor has its normal consistency prolapsus rarely follows the first cleansing of the wound immediately after the operation. It is impossible to prevent prolapsus in those cases in which the vitreous has degenerated and become fluid. Here it may be necessary even to go so far as to stitch the opening with two stitches of silk thread to prevent leakage, as I have done on several occasions. If we could foresee this condition—but I know of no physical sign by which we can discover the fluid vitreous—no surgeon would follow the ordinary method of operating in such cases. If we could be sure of our premises the only justifiable operation here would be the couching method.

To-day the ophthalmic world is slowly turning toward the Orient and watching with interest the work done by Surgeon Major Henry Smith, I. M. S., in delivering the lens within the capsule. In such a prolific field as India, with its three hundred millions of inhabitants, an ophthalmic surgeon has unlimited opportunities to put into practice any method to which he aspires. If one surgeon can perform 2,616 extractions in one year, with the following results, iritis 0.3 per cent., escape of vitreous 6.8 per cent., capsule bursting 8 per cent., capsule left behind 4.28 per cent, first class results 99.38 per cent., second class results 0.3 per cent, failures 0.34 per cent., it must make the ophthalmic surgeons of Europe and America hesitate to give their results drawn from the meager field around them. My experience leads me to agree with Surgeon Major H. Herbert, I. M. S., of Bombay, who says: "Extraction within the capsule is, with us, commonly reserved for over-ripe cataracts in which the capsule is not only opaque, but also too tough to be torn by the cystitome." He further says: "I have been surprised and disappointed to find the average visual acuteness obtained by this operation, tested by spherical lenses on discharge from the hospital about a fortnight after the operation, to be certainly no better, and, perhaps, rather inferior to that obtained by the ordinary operation." In commenting on the work done by these two operators of equal ability in the same field, with the same race, we have diametrically opposite opinions as to the value of the operation of removing the lens within its capsule.

Meyer of Paris, one of the most skillful ophthalmic

surgeons of his day, in speaking of this operation twenty-five years ago, said:

Extraction of the lens in its capsule does not appear to be admissible as a general method applicable to all cases, but should be restricted to those in which it seems probable that the strength of the suspensory ligament is defective—for example, when the cataract is over-ripe, when the iris is tremulous, and in strongly myopic eyes in which a general distension of the globe exists.

Macnamara says:

This is by no means a new method of extraction of the lens, having been practiced with varying success since 1775 and strongly advocated by Pagenstecher and M. Sperino. Having performed this operation extensively since 1864, I am convinced that if it were possible in every case in which we operate to remove the lens in the capsule without damaging the other structures of the eye, we should have reached perfection in the extraction of the cataract.

Dr. D. W. Green,[3] Dayton, Ohio, in a recent article, his given his experience in operating in twenty-four cases by the so-called "Indian method." He says:

Is it an operation that ought generally to be adopted, as Smith contends it should be, by the average operator and in the average class of cases? I think not, for the following reasons: It is more difficult to deliver the lens in this way than with the capsulotomy, even if one be experienced with the method. The operator who only does ten or twelve operations a year or fewer can not from this small number acquire enough skill to do justice to the method himself.

In referring to Dr. Green's statistics his results were not encouraging.

The lens was delivered entire in 55 per cent.; vitreous was lost in 35 per cent.; glaucoma followed in 15 per cent.; iritis in 20 per cent.; and an average of 20/70 vision was secured with correcting glasses.

WHAT METHOD SHOULD WE ADOPT?

From the recorded experiences of many ophthalmic surgeons no doubt the conservative instructors in ophthalmology would select the combined operation as the method to be taught in our schools of ophthalmology for the younger ophthalmologists to follow. The combined operation, in the hands of the majority of operators, good, bad and indifferent, the world over, gives a larger number of perfectly successful results, and cases of complete failures are less frequent than by any other.

PREPARATION OF INSTRUMENTS.

Formerly, I took all the precautions necessary for thorough sterilization by boiling in water and by dry heat in a sterilizer; these extra precautions I found resulted in destroying instruments and did not improve my statistics. I long ago (ten years) returned to cleansing my instruments in diluted alcohol (alcohol ℥i, aquæ destillata ℥iii); after immersing them in this solution for five minutes they are then carefully dried with sterilized gauze.

Here I wish to enter a protest against the introduction of metallic handles for knives and cystitomes as a substitute for ivory. An instrument having a metallic handle can not be held by fingers and thumb with the same lightness and delicacy of touch as one having an ivory handle. In an operation so important as the removal of cataract, what conscientious surgeon hesitates to obtain the best instruments of the choicest mechanical finish to aid him in making such operations a surgical success, especially since we have the means of making these refined instruments clean, preserving their cutting edge, and not destroying them by heat and chemicals before their work is accomplished?

Drs. Weeks and Landolt have called attention to the incision for the easy delivery of the cataract. I have described the accuracy of manipulation of the iris in securing the ideal keyhole iridectomy; the opening of the capsule, by many instruments devised for the purpose, vertical and horizontal crosses, peripheral incisions, and extracting the anterior leaf with capsular forceps; the delivery of the lens within its capsule and without, not even forgetting the flushing of the anterior chamber to clear this space of all cortical matter or filling the globe with a saline solution where much vitreous has been lost. All this should be done with a gentleness of touch and with delicate instruments "so that nothing be effected by force which can be accomplished by art."

3. Ophthalmology, January, 1907.

[THE OTHER PAPERS IN THIS SYMPOSIUM ON CATARACT WILL BE PUBLISHED NEXT WEEK, AND THE DISCUSSION WILL FOLLOW.]

SUBSEQUENT HISTORIES OF ONE HUNDRED AND SIXTY "ARRESTED CASES" OF TUBERCULOSIS TREATED AT THE SHARON SANATORIUM, 1891-1906.*

VINCENT Y. BOWDITCH, M.D.
BOSTON.

WITH THE COLLABORATION OF WALTER A. GRIFFIN, M.D.
SHARON, MASS.

In offering you the results of work of over fifteen years at the Sharon Sanatorium, this time with the invaluable assistance of Dr. Griffin, neither he nor I offer any apology for what may seem an unnecessary harping on a subject which has become familiar in the past few years since the crusade against tuberculosis has assumed such great proportions.

It must be remembered that in certain respects, so far as climate, altitude and proximity to the sea and a large city are concerned, the Sharon Sanatorium was for several years unique. The results of treatment, therefore, should be kept before you that you may judge whether that which was begun sixteen years ago as an experiment has proved a success or otherwise.

As shown by the title of the paper, I still adhere to the term "arrested" in speaking of cases in which the most important symptoms (chiefly cough, expectoration and fever) have disappeared during a long or short stay at the sanatorium, the patient's general appearance being one of good health. This is chiefly done for the sake of uniformity with previous records given to this society,[1] although in the annual reports of the institution the nomenclature recommended by the National Association for the Study and Prevention of Tuberculosis has been added to the older method. A feeling of conservatism, moreover, and a desire to counteract the harmful effect of claiming too much at first in the treatment of a disease so uncertain and treacherous as tuberculosis, are additional reasons, I confess, for not having made use even of the term "apparently cured" when the patients leave the sanatorium, in spite of the fact that

* Read at a meeting of the American Climatological Association, at Washington, D. C., May, 1907.

1. Subsequent Histories of Arrested Cases of Phthisis treated at the Sharon Sanatorium. Boston Med. and Surg. Jour., June 22, 1899; Trans. Amer. Climatological Assn., 1899. Subsequent Histories of Seventy-nine Arrested Cases of Phthisis treated at the Sharon Sanatorium from 1891 to 1902. THE JOURNAL A. M. A., Nov. 14, 1903; Trans. Amer. Climatological Assn., 1903.

the subsequent histories in very many cases would seem amply to justify the less conservative term.

Up to the autumn of 1900 there was a capacity of nine beds only, but since that time the addition of a large wing has increased the number of beds to twenty-two.

Since the opening of the institution in February, 1891, up to one year ago (January, 1906) we have discharged 362 patients, among whom 35 either remained too short a time (less than one month) or proved to be non-tuberculous, and so were not considered in the results. The remainder only (327) are taken into consideration. Of these, 160 were classed as "arrested" cases. In reporting the subsequent histories of these cases we have divided them into two series, viz., (1) those who were included in my last paper entitled "Histories of Seventy-nine Arrested Cases of Phthisis, etc., 1891 to 1902," the last one of these having been discharged in February, 1902, over five years ago; (2) those who have been discharged as "arrested" cases since that date up to one year ago (January, 1906).

In my last paper I gave brief subsequent histories of the arrested cases in patients who had died after varying periods of a cessation of all symptoms. It was interesting to note that a large percentage of these had signs of more or less advanced disease, in which arrest of the morbid process was hardly to have been expected. In others hard work and a return to unhygienic conditions of life seemed the chief reasons for their subsequent relapse after several years of good health. The details of these published cases can be easily referred to by those interested to know the exact facts.

Since the publication of my last paper in 1903, six more of the patients then reported have relapsed and died. I have tabulated them as follows:

CASE 129 (L. B. W.)—Incipient. Death January, 1906, five and one-half years after discharge. In January, 1903, two years or more after discharge, at work in a factory and health reported "good."

CASE 136 (F. A. L.)—Incipient, well marked. Death about five years after discharge; details unknown.

CASE 149 (E. C. C.)—Advanced phthisis in both lungs. Death December, 1904, three and one-half years after discharge. Two and one-half years after discharge health reported "good."

CASE 153 (A. J. F.)—Incipient. Death one and one-half years after discharge. No other details obtainable.

CASE 174 (L. G. W.)—Incipient. Death one and one-half years after discharge. Left sanatorium against urgent advice after only seven weeks stay.

CASE 181 (M. A. McK.)—Advanced phthisis. Death about three years after discharge.

In looking through these six reports it will be seen that two patients had advanced disease and arrest of the process was unexpected, and yet both lived three years after discharge. One entered a factory, the usual conditions of which we know to be unfavorable to health. One left the sanatorium far too early to accomplish the best results, and against advice. Of the other two, no satisfactory data can be learned as to the subsequent methods of life or cause of death. These six cases, added to the twelve recorded in my last paper, make eighteen patients who have died out of the first series, or the seventy-nine patients discharged as "arrested" up to 1902—25 per cent.

Three of the cases in the first series, of whom up to the time of writing no recent report could be obtained, are tabulated as follows:

CASE 49 (H. Q.)—Discharged October, 1894. Perfectly well four years ago. In robust health, working as a domestic nine years after discharge. Although we have no present record we have no reason to believe her dead.[2]

CASE 122 (A. D.)—Discharged October, 1900. Perfectly well at last report, about one year ago, six years after discharge. Working at curtain stitching.

CASE 179 (L. C. K.)—Discharged December, 1901. "Health good" January, 1903. Not traced since.

SUMMARY OF THE FIRST SERIES.

Still living, most of them housekeepers or wage-earners and apparently in good health	72.5 + %
Not heard of recently	2.5 + %
(Two at least of these cases when last heard of had been in robust health for several years after leaving the sanatorium.)	
Died	25 — %

SUMMARY OF THE SECOND SERIES.

Among the cases of the second series, which includes those discharged from April, 1902, to Jan. 1, 1906, we have the following record:

81 were discharged as "arrested." Of these	
77 are alive and apparently well, most of them housekeepers or wage-earners, about	95 %
3 have died, about	3.7 %
1 has sent no recent report and thus far has not been traced, about	1.4 %

Of the three who have died, one was in an advanced stage, following a remarkable condition of arrest for some months, and finally succumbed after a return to hard work in a convent. One had incipient disease, but remained only one month at the sanatorium and died of "paralysis" at the Massachusetts General Hospital two years later; no mention was made of phthisis. The third was a patient with advanced disease who was discharged as "arrested," but after hard work relapsed and died.

TOTAL NUMBER OF ARRESTED CASES.

In summing up the total number of arrested cases, therefore, we have the following results:

FROM THE YEAR 1891 TO 1906.

Total number "arrested"	160
Number still living and well, most of them housekeepers or wage-earners	134 = 83 + %
Number who have not recently been heard of, but who at last accounts were doing well, many of them in robust health	5 = 3 + %
Number who have since relapsed and died	21 = 13 + %

Owing to the bulk of such material we have not attempted to print the tabulation of these cases in detail, as we did when we gave the last report. All were evidently of tubercular nature, as proved either by the presence of bacilli in the sputa, the tuberculin test, or such marked signs in the chest, combined with the history, as to make the diagnosis undoubted. It should be added that several patients were given the tuberculin test simply as a matter of corroboration of a previous diagnosis and as an additional means of convincing others who might be skeptical.

A few cases are appended as examples of the kind which are admitted to the sanatorium:

CASE 207.—H. H. H., aged 31, housewife, incipient, arrested; length of stay, five and one-half months.

Family History.—No tuberculosis.

Personal History.—Frequent "colds" in last three years.

Present Illness.—Cough for four and one-half months; in bed two months. Tubercle bacilli twice found before entrance.

Physical Examination.—(April). Dulness in both tops with + respiration and tactile fremitus. Dulness in lower right back with bronchial respiration, bronchophony and numerous

2. Since time of writing, this patient has been seen and is in perfect health, which alters the percentages somewhat.

fine râles. No sputa after entrance. Patient was kept in bed for a week and then gradually allowed about. The chest condition steadily improved till in October nothing abnormal could be found. No cough. Keeping house and indoors from 8 to 9 hours a day; windows open at night.

CASE 265.—E. M. S., aged 30, housewife, advanced, arrested; length of stay, five months.

Family History.—Mother's mother died of consumption.

Personal History.—"Catarrhal trouble" several years.

Present Illness.—Run down eight months, cough four months.

Physical Examination.—Dulness in both tops, but especially in the left. Respiration broncho-vesicular in right top and + in left top. Numerous fine râles in upper two-thirds of left lung. Cough and sputa rapidly stopped. Tubercle bacilli were found on two occasions. Chest signs improved much in degree, although about same areas involved. Now, three years after discharge, has no cough. Is keeping house and stays indoors most of the time.

CASE 270.—M. E. McG., aged 24, incipient, arrested; length of stay, three months.

Family History.—One sister died of phthisis.

Personal History.—Typhoid eight years before.

Present Illness.—"Bronchitis" eighteen months before and some cough since.

Physical Examination.—Slight dulness in both tops with + voice and fine râles on both sides at apices front and back. Tubercle bacilli found in sputa. Signs nearly all cleared up; very little at apices in back. No cough, no sputa at discharge. Has continued in good health three years and has had two children.

CASE 319.—A. D. P., aged 25, shoe factory worker, advanced, arrested; length of stay, six months. Family and personal history negative.

Present Illness.—Cough for two months.

Physical Examination.—Thin, pale, temperature up to 102 and 103 (gradually coming to normal after a month). Marked dulness in right top with harsh respiration and fine râles in back; also dulness in lower right back with rather coarser râles. Little dulness left top with broncho-vesicular respiration and fine râles in back. Numerous tubercle bacilli. Patient was kept in bed and not allowed company for weeks; but during six months' stay she gained 39 pounds, lost all cough and showed in the chest only very slight signs at right base. Feels perfectly well after two years. No cough.

Here I feel that I should state my own opinion, which I know is shared by many, that the presence of tubercle bacilli in the sputa is the only absolute test of the presence of pulmonary tuberculosis, although I believe that many cases can be diagnosed without even the presence of bacilli. The tuberculin test, although I believe it to be helpful often as an adjunct in determining the true nature of a case, I can not regard as infallible and I deprecate absolute reliance on it. I should add also that I have never seen a case which I thought harmed by its judicious use, although it is not a thing to be employed indiscriminately or carelessly.

A few words should be said about our experience at Sharon with tuberculin used therapeutically. Having been very conservative in its adoption, we have, finally, during the past few years, carefully used it in selected cases when we had found that the ordinary hygienic methods, faithfully tried for a period of weeks or months, had failed to arrest the disease and the patients remained in *statu quo*. Recently we have been encouraged to begin its use earlier during the patient's stay. Through the courtesy and kindness of those in control of the Saranac Laboratory, chiefly Dr. Trudeau and Dr. E. R. Baldwin, in supplying us, we have the advantage of using a tuberculin from a reliable source and have confined ourselves almost entirely to their products. The cases are necessarily but few in number, and it would be impossible for us to make absolute statements as to the efficacy of this specific treatment. That we have been impressed by the results in certain cases in which the disease before had seemed to remain practically unchanged is perfectly true, for some of the patients have been discharged after a treatment of several months without cough or sputa and have continued, at last accounts, to do well in their homes, this having been accomplished after a period of discouragement with the ordinary sanatorium methods. Our experience has led us to test the treatment carefully still further without fear of possible injury. So far, barring an occasional rise of temperature after a somewhat larger dose than usual, no lasting ill effects have been noticed. In one case only have we discontinued the treatment because of the apparently unfavorable effect on the patient. Whether this is to be the method of the future, time and study of many cases alone can tell. At present our position is that of one who is impressed, if not absolutely convinced, of its efficacy. We still believe that in the majority of cases the fresh air treatment is the chief factor in restoring people to health.

Reports of two patients who were treated with tuberculin and afterward discharged as "arrested" are hereby appended, as reported by Dr. Griffin in a paper read by him in 1906:[3]

CASE 243.—A woman was admitted first April 20, 1903. There were well-marked signs all over the left side of the chest and at the top of the right. The sputa contained many tubercle bacilli. With ordinary sanatorium treatment the cough and expectoration ceased and the weight increased 42 pounds. She was discharged at the end of eight months. June 11, 1904, she was readmitted for renewed cough and expectoration. For five months the physical signs and general condition remained about the same. Bacilli could be demonstrated in the sputa at any time. Finally, since there had been no appreciable change since entrance, Dr. Bowditch decided to try tuberculin. Twenty-seven injections were given over a period of five months, ranging from 0.0005 gm. to 0.600 gm. In all 2.1 gm. were given. Soon after the treatment was begun the cough increased, and at this time the bacilli were more numerous in the sputum in this case than in that of any other patient in the sanatorium; but this condition rapidly improved, and for more than a month before discharge the cough and expectoration were *nil*, while the signs in the chest were likewise much improved, and I understand that she has remained in good health since. (April, 1907.)

CASE 342.—This patient came with a history of a cough for five months. There were well-marked signs over the upper two-thirds of the left chest, and tubercle bacilli were present in the sputum. Soon after the cough and expectoration increased and there were slight rise in temperature in the afternoon. From this time there were numerous upsets and after the patient had been in the sanatorium three and a half months the signs had increased so as to be nearly all over the left side and with slight signs on the right. The voice was also husky and the larynx showed redness and swelling about the arytenoids and redness of the vocal bands. At this time treatment was begun with tuberculin. At first there was a little fever after nearly every injection. The cough increased also and there were more bacilli in the sputum. Gradually all the signs and symptoms improved until at discharge there had been no cough or expectoration for some time, and the signs in the chest had cleared up to a marked degree. Treatment was continued for a period of seven and one-half months. In all there were 58 injections, the last one being .580 gm. By a recent report (January, 1907), the cough and expectoration had not returned and the patient was feeling well.

In giving these results both Dr. Griffin and I feel that we have been conservative in our claims, many cases

3. "Tuberculin in Treatment of Pulmonary Tuberculosis." Boston Med. and Surg. Jour., July 5, 1906, p. 6-8.

having been put aside as non-tuberculous or only as suspected cases in which further symptoms did not develop when under close observation. Moreover, we have not placed in the list of arrested cases certain patients who were discharged only as "much improved" and have since apparently ceased to have abnormal symptoms under favorable conditions. Neither have we touched on the fact that many patients who have been discharged as "improved" merely, have returned to their homes well enough to be able to resume home duties while keeping up the treatment of which they have learned by experience to know the value, at the same time acting as missionaries in the communities in which they live.

When one looks back not more than twenty years and remembers the hopelessness we felt in our endeavors to check the disease by ordinary methods, surely we can say that we were justified in our hopes that much more could be done than was formerly thought possible in the treatment of consumption. Unfortunately the extraordinary and oftentimes ill-judged enthusiasm which has spread of late years so rapidly through the medical profession and the laity has had a slight reaction recently, simply because too much was claimed by the overzealous in many cases. Those who have been more cautious in making claims have viewed this extravagance with regret, knowing that it would bring harm to the cause for which they were working. I believe that we are now entering a healthier phase of the question, however, and that while we know that we have not yet found the panacea for the cure of consumption, we can at least claim that a great step forward has been made, with still greater hope for the future.

Too much can not be said of the educational effect of these institutions, which not only help the individuals afflicted but teach others how to resist disease and to keep well. If nothing more than this were accomplished it would be of infinite service to future generations and well worth the time and money expended. The more recent movements for home treatment through dispensaries or otherwise, the establishment of hospitals for the hopelessly ill, have all their important place and mark still another important step toward controlling the ravages of this dreadful disease.

In conclusion, it may be well for me to express my opinion as to the relative value of the so-called "home" and "climatic" treatment. Briefly stated, it is this: We know now that an immense deal of good has been and still can be accomplished by the methods which are being adopted more and more near the homes of patients suffering from tuberculosis. It has been satisfactorily proved that much more has been done in these ways than was thought possible fifteen years or even a decade ago. I can not sympathize, however, with what I feel to be the extreme views of some observers who, because of the success of these less radical measures in a large number of cases, maintain the opinion that there is not the slightest use in ever sending a phthisical patient away from home to a distant climate. Such an opinion is inconsistent with my own experience in certain patients whom I have seen improve by such a change after a discouraging attempt to improve near home.

The relapse of certain patients on a return to these regions after a successful sojourn elsewhere is another proof to me of the incorrectness of view of those who argue against the necessity of radical change in any case. When we know from experience the tonic effect on ourselves, even when in health, of a change to a mountainous region or to a different ocean climate, how can we deny the possibility of an equally beneficial effect on a tuberculous patient, a change which may be a marked factor in his improvement and his power to resist the disease?

That certain patients, however, do better in their home climate than elsewhere is also to be noted. In advocating the wisdom of a radical change for some patients it would seem almost unnecessary to add that I refer only to those who can adopt such measures with comparative ease, when pecuniary considerations need not be weighed, and when the attitude of mind is favorable. I also strongly deprecate the not infrequent instances of urging patients with far-advanced disease to leave their homes in search of health. To judge of these conditions and make the final decision in each case is the crucial test of the skill of the physician in charge.

THE WORK OF A CHRONIC TYPHOID GERM DISTRIBUTOR.*

GEORGE A SOPER, PH.D
NEW YORK CITY.

In the winter of 1906 I was called on to investigate a household epidemic of typhoid fever which had broken out in the latter part of August at Oyster Bay, N. Y. The epidemic had been studied carefully immediately after it took place, but its cause had not been ascertained with as much certainty as seemed desirable to the owner of the property.

The essential facts concerning the investigation follow:

THE OYSTER BAY OUTBREAK.

At Oyster Bay in the summer of 1906 six persons in a household of eleven were attacked with typhoid fever. The house was large, surrounded with ample grounds, in a desirable part of the village, and had been rented for the summer by a New York banker.

The first person was taken sick on August 27 and the last on September 3. The diagnosis of typhoid was positive. Two of the patients were sent to the Nassau Hospital at Mineola. The others were attended by capable physicians at Oyster Bay. None of the subsequent cases apparently resulted from the first, although the interval from the first to the last might permit of this assumption. But whether the disease was transmitted from one person to another after the first case occurred was not a matter of great consequence. The most important question was how the first case occurred.

Typhoid fever is an unusual disease in Oyster Bay, according to the three physicians who share the medical practice there. At the time of the outbreak no other case was known. None followed.

The milk supply of this house was the same as used by most of the other persons in the village, all of whom remained well. The cream also was from a source which supplied several other families in the vicinity.

To the first investigators it seemed that the water must have been contaminated. They were unable to ascribe the fever to food, flies or milk, whereas if they could discover that the water had been contaminated they would be able to account for the epidemic.

The water supply for the house was from a driven well said to be 167 feet deep. The well was at a distance of 210 feet from the house, within 60 feet of a

* Read before the Biological Society of Washington, D. C., April 6, 1907.

stable drain, 115 feet from a privy behind the stable, and 224 feet from two cesspools which received the drainage of the house. The cesspools and privy had been cleaned out in April. The house was provided with one water closet, situated on the second floor. This was used by the family. The six servants used the privy. The sewage from the house was carried by a tile pipe to the two cesspools just referred to. The soil is sandy and gravelly throughout this region.

The water was pumped from the well by a gas engine to a covered wooden tank situated 186 feet from the stable and 320 feet from the house. Water ran from this outside tank to an open tank in the attic of the house, removed from the nearest living rooms by a steep and narrow ladder.

Samples of the water were taken and subjected to careful chemical and bacteriologic analysis. They were collected direct from the pump, from the outside tank and from a faucet in the house. There were five samples taken in all. Four were examined by E. E. Smith, M.D., Ph.D., the well-known analytic expert, and the other by D. D. Jackson, Ph.D., director of the laboratories of the New York City Department of Water Supply, Gas and Electricity.

The essential facts concerning these analyses, including condensed statements of the resulting opinions, follow:

ANALYSES OF WATER FROM OYSTER BAY.

1906.	SOURCE OF SAMPLE.	OPINION OF ANALYST.
Sept. 12.	Faucet in house	"Sanitarily pure."—Dr. Smith.
Sept. 12.	Outside tank	"Probably safe."—Dr. Smith.
Sept. 13.	Pump over well	"No evidence of pollution."—Dr. Smith.
Sept. 27.	Outside tank	"Typhoid from this source impossible.—Dr. Jackson.
Sept. 29.	Outside tank	"Evidence does not show pollution."—Dr. Smith.

In addition to these examinations, an experimental study was made of the possibility that the typhoid germs might have percolated through the ground to the well from some receptacle of excrement. On September 29 Dr. Smith put fluorescin in the bowl of the water closet in the house, in the cesspools, in the stable manure vault, in the privy vault on this property and in another on adjacent property and in the bowl of the water closet in a neighboring house. He looked for traces of this fluorescin in water from the well, obtained after much pumping, two days and five days later. Six samples of water were collected during this test. They entirely failed to reveal pollution.

Even this thorough work on the water supply did not entirely destroy local confidence in the theory that the water had been the cause of the outbreak. A contamination of the outside covered tank of such nature as to escape detection by analysis was suspected as offering a possible explanation of the trouble. According to this idea the tank, which had been cleaned early in the spring, might have received typhoid bacilli from the cleaners who, perhaps, carried typhoid excreta on their boots. It was supposed that a gradual accumulation of organic matter from the water and dust from the air, aided by the continued warmth of the summer sun, might have led these germs to multiply until at last they escaped to the water and infected the household.

It did not seem to me that the water theory was tenable. The analyses proved that the well was not continuously polluted. The fluorescin tests showed that occasional contamination was not likely. An inspection of the premises and inquiries concerning the way the outside tank was cleaned made it seem unlikely that this tank became infested in the way supposed.

It would have been more probable to suppose that the tank in the house, which was without a cover and accessible to occupants of the house, had become polluted. Such contamination was not without precedent. Had typhoid existed in the house at the time, it was possible that the tank could have become contaminated in this way. But there had been no case. Moreover, inquiry made it seem unlikely that the tank had been visited all summer. It was much more convenient for persons to get water otherwise than by climbing the narrow ladder to the attic. It seemed more probable that the infectious material had been carried to the house by some person or some article of food.

I was led from the proper track for a time by being assured that no person who had had typhoid, at least within many months, had lived in the house or visited it during the whole summer, and by discovering that the family was extremely fond of soft clams. My suspicion for a time attached to clams. It was found that soft clams had frequently been obtained in the summer from an old Indian woman who lived in a tent on the beach not far from the house. It was impossible to find this woman, but I made inspections of the sources of soft clams at Oyster Bay, which showed that they were sometimes taken from places where they were polluted with sewage.

But if clams had been responsible for the outbreak it did not seem clear why the fever should have been confined to this house. Soft clams form a very common article of diet among the native inhabitants of Oyster Bay. On inquiring closely into the question of the food eaten before the outbreak it was eventually found that no clams had been eaten subsequent to July 15. This removed the possibility that the epidemic had been caused by clams. From July 15 to August 27, six weeks, was too long a period for an outbreak of this character to remain undeveloped. The infectious matter which produced the epidemic had been taken with food or drink, in my opinion, on or before August 20.

The supplies of vegetables and fruit were next considered. It was found that the persons attacked had not eaten any raw fruit or vegetables which had not also been eaten by many persons who escaped the fever.

The history of the house with regard to typhoid was inquired into. It was found that but one case of typhoid had occurred on the premises or been nursed there in thirteen years. This case occurred in 1901. Care seemed to have been taken to destroy the infectious nature of the discharges. The case produced no secondary cases at the time. The house had been occupied every summer since without typhoid.

Attention was now concentrated for a time on the first cases to determine whether the infection could have occurred during a temporary absence from Oyster Bay. It was found that those persons who were taken sick at the outset had not been on a visit, or picnic, or, in fact, away from Oyster Bay on any account for several weeks prior to the onset of the illness.

The social position of the persons attacked differed decidedly. Among the first to be taken sick were a daughter of the head of the family and two maid servants, one of which was colored. Following in quick succession were the wife and then another daughter of the tenant and, finally, the gardener who lived permanently at Oyster Bay and had worked on the place for years.

Believing that some peculiar event might have occurred in the family on or shortly before August 20

which, if studied, might give the necessary clue to the cause of the epidemic, careful inquiry was made into the immediate history of the household at this time. The key of the situation was thus discovered.

It was found that the family had changed cooks on August 4. This was about three weeks before the typhoid epidemic broke out. A cook who had been with the family several years had been discharged and a new one employed. Little was known about the new cook's history. She had been engaged at an employment bureau which gave her an excellent recommendation. She remained in the family only a short time, leaving about three weeks after the outbreak of typhoid occurred. Her present whereabouts were unknown. The cook was described as an Irish woman about 40 years of age, tall, heavy, single. She seemed to be in perfect health.

Here was by all means the most important possibility in the way of a clue which had come to my notice. If this woman could be found and questioned, it seemed likely that she could give facts from which the cause of the epidemic could be ascertained.

When, after much difficulty, she was found, this hope was destroyed. No information of value was obtainable from her. She refused to speak to me or any one about herself or her history except on matters which she knew were already well known.

It became necessary to work out the cook's history without her help. This effort has been only partially satisfactory. Her whereabouts for only a part of the time in the last ten years have been ascertained. About two years of time among the last five years remain unaccounted for. In the last ten years she has worked for eight families to my positive knowledge; in seven of these typhoid has followed her. She has always escaped in the epidemics with which she has been connected.

The most interesting features of the other outbreaks of typhoid with which this cook has been connected follow:

EPIDEMIC AT SANDS POINT IN 1904.

In 1904 a well-known New York family on moving to Sands Point, L. I., to spend the summer experienced an epidemic of typhoid which attracted a considerable amount of attention at the time. The household consisted of eleven persons, seven of whom were servants. The household arrived on June 1. On June 8, or about one week later, typhoid began to appear.

The first person to be taken sick was the laundress. She had entered the employ of this family ten days before for the summer season. Following this case in irregular succession three other persons were taken sick. Within three weeks after arrival, there were four persons, in all, attacked.

None of the family itself was taken sick. No person was attacked who had been long with the family. The new laundress fell ill first, then the gardener who had not come from the city with the family, but worked on the place the year round, then the butler's wife, and finally the butler's wife's sister. The latter was not in the family service, but lived with the other servants in a little house separate from the main dwelling.

The cook had been in the family nine months, seemingly without suffering from typhoid fever or producing typhoid.

The Sands Point epidemic was confined to the house where the servants lived. There were no other cases in the vicinity. None preceded this outbreak and none followed at Sands Point. No doubt could be placed on the diagnosis. One of the cases, that of the laundress, was long and severe. There was no death.

The outbreak was studied by several persons. Finally, Dr. R. L. Wilson of the New York City Department of Health was called as expert to investigate it. Dr. Wilson examined the water supply, drainage and other sanitary conditions. He caused an analysis of the water to be made by Dr. Jeffreys of the New York Polyclinic. It is unnecessary to describe this analysis or the details of Dr. Wilson's careful investigation.

Dr. Wilson's conclusion was that the epidemic must have been caused by the laundress. In his opinion, she had probably been infected before entering this employment. Her case, he thought, gave rise to the others. Dr. Wilson tried to find how the laundress became infected before joining this family, but was unsuccessful.

EPIDEMIC AT DARK HARBOR, MAINE, IN 1902.

In 1902 a severe outbreak of typhoid occurred in the family of a prominent New York lawyer who had just taken his household, consisting of four in family and five servants, to Dark Harbor, Maine, to spend the summer. Seven members of this household of nine were soon ill of typhoid. In addition, a trained nurse was attacked, as, it is said, was a woman who was employed to work by the day.

The first case occurred two weeks after the arrival at Dark Harbor, on June 17. The onset of this case was sudden. In just one week another case occurred. Two days later there was a third. The remainder followed rapidly. The only persons who escaped were the cook and the head of the family; he had had an attack of typhoid fever some years before.

All the servants, except the cook, had been employed in this family for one month or more in New York. The cook had been engaged especially for the summer and had joined the family three weeks before it left New York.

The outbreak at Dark Harbor was studied by a number of persons and especially by Dr. E. A. Daniels of Boston and Dr. Louis Starr of Philadelphia. The house was new, never having been occupied before. It has been impossible to rent it since.

Because of its newness, the water supply of the house was not in every way satisfactory. A tank on the top floor of the house had not been cleaned since it was set in place. Until this cleaning was accomplished drinking water was obtained from a spring.

Water was never believed to have been the original cause of the outbreak. Two analyses of the water were made: one at the Massachusetts Institute of Technology in Boston and one in New York. They confirmed the opinion that the water was safe.

It was suspected that the household supply later became contaminated. A pitcher from a room in which the first typhoid case was nursed was supposed to have been filled at an open tank on the same floor, thus infecting the household supply. But the epidemic had already broken out when this event was believed to have occurred. Typhoid fever was scarcely known in Dark Harbor at the time of this outbreak and has been exceedingly rare since. No case immediately preceded or succeeded it.

It was believed by some that the original cause of the epidemic was the sickness of a footman—the first case. The theory was that the footman contracted his illness before going to Dark Harbor, either in New York or on the way. Dr. Daniels was of opinion that the first three cases received their infection in this way at the same time and place.

On making a careful study of the facts, both views seem to me untenable. The period of time which elapsed from the first to the second case was too short to agree with the theory that the first case led to the others. The incubation period required to be covered in the event that the first three cases were infected before reaching Dark Harbor was too long. Beside, for the most part, these three persons had not shared the same food for a long time.

OUTBREAK IN NEW YORK IN 1901.

The history of the cook before going to Dark Harbor is not entirely clear. In 1901-2 she lived about eleven months in one family. Here a laundress was taken ill and removed to Roosevelt Hospital, Dec. 9, 1901, one month after the cook's arrival. This case was seen by Dr. R. J. Carlisle of New York. The diagnosis was positive. The cause of the attack was not, apparently, investigated at the time, and fuller information concerning it has so far been difficult to obtain.

OUTBREAK AT MAMARONECK IN 1900.

My earliest record of the cook's employment is in a New York family which has a summer residence at Mamaroneck, N. Y. In this instance, a young man who made a visit to the family was attacked, his illness dating from Sept. 4, 1900. The circumstances in this case were such as to lead to the impression at the time that the infection occurred on Long Island. He had spent two weeks at East Hampton within a few miles of a fever-ridden camp occupied by U. S. soldiers at Montauk Point. It was thought that he might have been infected from water or by drinking from a cup used by some typhoid patient, or in some other way not known.

Inasmuch as the patient lived in the Mamaroneck household for at least ten days before the onset of his illness and, as his supposed exposure to typhoid on Long Island was by no means reasonably clear, it seems to me probable that he was infected by the cook. The cook left within a few days after the onset of this illness. She had been in the family for three years without, apparently, being connected in any way with typhoid.

OUTBREAK IN TUXEDO, N. Y., IN 1906.

Subsequent to her employment at Oyster Bay, the cook went to live in a family at Tuxedo Park, N. Y. She remained there from Sept. 21 to Oct. 27, 1906. On October 5, fourteen days after her arrival, a laundress was taken sick with typhoid fever and removed to St. Joseph's Hospital, Paterson, N. J.

According to Dr. E. C. Rushmore, who saw this case, no other case of typhoid had been known in Tuxedo for several years. Excepting the cook, all the servants had been in the family for two months or more. The cause of the laundress' illness was not made clear at the time.

FINAL OUTBREAK IN NEW YORK IN 1907.

When, at last, the cook's final whereabouts were ascertained, it was found that two cases of typhoid fever had broken out in the household where she was employed. These occurred a few weeks after her arrival. One patient, a chambermaid, was taken sick Jan. 23, 1907, and removed on January 29 to the Presbyterian Hospital, New York. The doctor was first called to see the other patient, a daughter of the owner of the house, on February 8. This second case resulted fatally on Feb. 23, 1907, the only fatal case in this whole record.

A period of two months elapsed between the beginning of the employment of the cook and the beginning of the first case of illness in this household. The New York City Department of Health officially investigated the first of these two cases at the time it was reported by the attending physician and, in the absence of evidence to the contrary, ascribed it to the public water supply.

The foregoing records by no means all the cases with which this cook may have been associated. As already mentioned, I have been able to trace but fragments of her history through the last ten years.

There is a remarkable resemblance between these seven fragments. In each instance one or more cases of typhoid have occurred in households from ten days to a few weeks after the cook has arrived or among people who have, within that period, come to live near her and eaten the food which she has prepared.

In every instance the families have been of ample means and accustomed to living well. In each household there have been four or five in the family and from five to seven servants. Four of the persons attacked have been laundresses. Two have been gardeners, permanently attached to the country places where the typhoid has broken out. All but two of the outbreaks have occurred in the country.

The cook has escaped sickness in every instance. In only one instance is it known that she has worked in a family where no typhoid has occurred. This family consisted of two people of advanced age and one old servant.

In all there have been twenty-six cases and one death. Twenty-four of these cases have occurred within the last five years.

ACTION OF NEW YORK CITY DEPARTMENT OF HEALTH.

Believing that sufficient had been learned concerning her history to show that the cook was a competent cause of typhoid and a menace to the public health, I laid the facts concerning the four principal epidemics here described before Dr. Herman M. Biggs, medical officer of health of the New York City Department of Health on March 11, 1907, with the suggestion that the woman be taken into custody by the department and her excretions made the subject of careful bacteriological examination. I had been unable to obtain her consent to any examination.

The department acted favorably on the suggestion and caused the cook to be removed to the Detention Hospital. She reached there March 19, 1907, after a severe struggle in which she showed remarkable bodily strength and agility. At the hospital the cook was placed in charge of Dr. Robert J. Wilson, superintendent of the department of hospitals, and Dr. William H. Park, chief of the bacteriological laboratories of the Department of Health.

Dr. M. Goodwin did the bacteriological work under Dr. Park's direction. It was expected by me that germs might be found in the urine, but more probably in the stools. None was found in the urine. The stools contained the germs in great numbers. Daily examinations made for over two weeks have failed only twice to reveal the presence of the *Bacillus typhosus*, and on these occasions the sample taken was perhaps too small to reveal them. The blood gave a positive Widal reaction. The cook appeared to be in perfect health.

We have here, in my judgment, a case of a chronic typhoid germ distributor, or, as the Germans say, a "typhusbazillenträgerin."

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THE MEDICINE AND SURGERY OF THREE GASTROINTESTINAL CASES.

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In view of the fact that the medical phase of certain gastrointestinal lesions wherein adhesions and partial obstruction or traction play a prominent part are so erratic symptomatically, these three cases are offered with the hope that some light may be thrown on the diagnosis and other pertinent factors:

CASE 1.—*History.*—Miss X., aged 43, gave no history of any illness that in any causative way was associated with eighteen years of intermittent gastrointestinal disturbances. The latter began with severe acute epigastric pain, no vomiting or nausea, but constant gaseous distension. Constipation was present both before and during these attacks, and in the course of ten days the skin would assume a dark, dirty yellowish hue, which phase of the illness would not disappear until free and daily purgation was produced. Opiates had but little subduing effect on the pains. After two or three weeks, complete relief would follow and a recurrence take place in about two or three months. The history clearly sets forth that diet had little or no effect either in a causative or therapeutic way. Once rectal feeding was used without obtaining the slightest relief. In view of the clinical symptoms, Dr. Francis Sherwood performed cholecystenterostomy about six years ago; no gallstones were found. For several months there was relief.

The recurrences became more frequent during the last two years. About six months ago Doctor Sherwood kindly asked me to see the patient and assume charge of the case.

Examination.—Briefly, the following facts were noted: General nutrition fair, complexion rather muddy, hemoglobin 85 per cent., appetite normal, no lesions discoverable other than the following findings, which did not vary much during the frequent examinations, and gastric analyses. In the gastric contents the total acidity varied from 80 to 110; no lactic acid; pepsin and rennin both present; hydrochloric acid from 35 to 40; eight-hour motility test gave normal results; bowels constipated. No relation between the gastric symptoms and the eating of a special food. Weight slightly diminished recently. Further examination gave the following results: Artificial distension of the stomach with gas made it clear that aside from being dilated it was also displaced; thus, the left margin corresponded to the left anterior axillary line, the lower margin descended from the left, passed about three inches below the umbilicus and terminated abruptly in the right iliac region near McBurney's point, and then ascended to the tenth right costal cartilage. The upper margin blended with the liver dulness. The semilunar space, aside from being shorter than normal, presented nothing unusual. The colon was artificially distended at the same time, and aside from clearly defining the location of the descending portion up to the splenic flexure, the transverse portion could not be located, and only remotely justified the assumption that it was displaced down, below the lower margin of the stomach. Further attempts to locate the stomach and colon always gave the above results. Once the stomach was filled with two liters of water, all it could hold. There was no call for the use of the gastric bag or the bismuth Roentgen ray method.

It was clear that there were well-defined departures from the normal. It was hard to reconcile the gastric dilatation with normal motility and hyperacidity, and equally as great a problem was offered when these were considered in connection with pyloric stenosis. How were the cycles of disturbances related to the physical findings? Add to these the presence of coprostasis and the pigmentation of the skin, which is so peculiar to the former disturbance, and the problem becomes more complicated. The findings pointed to adhesions that were exerting traction on the stomach and partially obstructing the colon.

Operation.—Dr. Sherwood operated on the patient, and found the middle portion of the transverse colon dragged down behind the cecum and firmly adherent to its posterior wall; the same adhesions had also bound down the pyloric portion of the stomach. All these were cautiously loosened.

Postoperative History.—Three months after the operation the conditions were as follows: Total acidity of gastric contents, 75; occasionally the epigastric pains reappear, but subside in the course of a few days, after dietetic and purgative medication. General nutrition good.

CASE 2.—*History.*—Male, aged 42; about fifteen years previously had typhoid fever; during convalescence he overindulged in food and had a relapse. Beginning several months after complete recovery from the fever he had gastric disturbances every three or four weeks. The attacks were ushered in with acute gaseous distension, nausea and vomiting of large quantities of watery acid fluid; the quantity so vomited exceeded, he thought, the fluid he had drunk. These disturbances subsided in about seven or ten days, under restricted diet and rest in bed. It was possible to induce the attacks by careless eating of foods; however, there was no time when he rated his stomach as equal to the normal. In the course of the next fourteen years he passed through a multitude of experiences in the use of stomach tonics and cures. About one year before the present illness he came under observation when in the midst of an attack. He had just vomited three quarts of fairly clear fluid, which gave a reaction for free HCl. The usual methods brought out the fact that the stomach was dilated. He could not trace any of the attacks to faulty dietetics or his occupation. The symptom syndrome suggested acute dilatation of the stomach of unknown origin. Under ten days of rectal feeding he recovered and passed out of notice. Recently he returned, still afflicted with the cycles of acute vomiting of large quantities of acid fluid, and he thought his condition had become much worse during the past year.

Examination.—The findings were as follows: Total acidity, 105; free HCl, 65; rennin and pepsin present; no lactic acid; motility normal or nearly so. Artificial distension of the stomach in all respects resembled the first case. Note the intermittent cycles of disturbance, the hyperacidity, etc. The diagnosis again was in favor of adhesions, and in keeping with this view operation was urged and promptly agreed to.

Operation.—Dr. M. L. Harris discovered adhesions in the right iliac region that aside from involving the ileum and cecum also exerted traction on the mesentery of the stomach, and thus accounted for the downward displacement; the stomach was perceptibly dilated.

Postoperative History.—Six weeks after operation the stomach occupied its normal place and the gastric chemistry was normal. The patient was able to partake of all ordinary foods. Four months after the operation he was able to enjoy all ordinary articles of diet without distress following. A recent gastric analysis still points to hyperacidity. He is perfectly satisfied with the results, and adds that only ordinary care in eating is necessary.

CASE 3.—*History.*—Male, aged 52, gave the following history: During boyhood he was severely burned (second degree); recalls that some weeks passed before he was able to leave his bed. Not long after that event he was struck on the abdomen with a slate, and asserts that the blow caused pain for several days. Later on he was kicked on the abdomen by a horse, but no serious results followed. When engaged in restraining a maniacal man, about two years before I saw him, he was again kicked on the abdomen, with no after-effects other than a local tenderness of two days' duration. Aside from these events his physical condition was disturbed during early manhood, and up to the present time by cycles of gastrointestinal disturbances, such as gaseous distension beginning about one hour after a meal and lasting four or five hours; nausea with much gastric distress, but not with acute pain; eructation of an acid sour fluid for hours after eating; daily loss of weight; moderate constipation and loss of appetite. These symptoms often followed dietetic indiscretions, but occurred equally as often without that cause. When he took salines and limited his

diet to milk for several days he obtained relief. These cycles usually occurred eight or ten times a year and lasted from a few days to several weeks. Like the preceding patient, he tried a multitude of remedies, and finally used the stomach tube quite often.

Examination.—When he came under observation the following objective symptoms were noted: Total acidity of gastric contents, 110; aside from the hyperacidity there was no departure from the normal. All the gastric juice analyses gave hyperacidity and, I presume, hypersecretion, though the latter phase is based on conjecture purely. The distended stomach clearly pointed to dilatation of that organ; however, there was no abnormal anatomic position. The lower stomach margin extended fully 10 cm. below the umbilicus. A bismuth Roentgen ray picture fully verified these latter findings. Palpation was negative with regard both to enlargement and tenderness. Note that in this case there apparently was normal motility, a dilated stomach and, to a moderate degree, the symptoms of a pyloric stenosis; that the lesion had practically existed over thirty years; that he had distinct cycles; that diet clearly was associated with the gastric symptoms, and that he had hyperacidity almost constantly. The diagnosis was healed ulcer in the pylorus with partial obstruction.

Operation.—Dr. M. L. Harris operated on this patient and found a healed duodenal ulcer and a well-defined incomplete stenosis. A gastroenterostomy completed the operation. His condition two months after operation was as follows: Gastric juice still showed high total acidity; weight increased; gastric symptoms had nearly disappeared; stomach was still dilated, though less than formerly. He had found it necessary to exclude ordinary indigestible foods, but had resumed work.

CONCLUSIONS.

History of traumatism, burns, acute abdominal inflammatory lesions, gastric ulcer, infectious diseases such as typhoid fever and dysentery and pelvic lesions.

Gastrointestinal disturbances distinctly remittent, the intervening periods of slight departure from the normal varying in duration from a few weeks to as many months. The cycles of pronounced distress sometimes due to a fault in dietetics and equally as often without apparent cause.

Chronic gastric dilation with displacement of the stomach and portions of the intestine. Hyperacidity and fairly normal motility; this, however, would vary in different cases and in an individual case, leaving the question open. A lesion may be situated in the intestinal tract and give rise almost wholly to purely gastric disturbances. Constipation was a constant accompaniment.

Medical and dietetic treatment will give only temporary relief. The diagnosis of gastric neuroses and chronic gastric catarrhs will become less frequent when surgery is resorted to and reveals adhesions, etc. The surgical treatment may give absolute relief promptly, though usually the long-continued disturbances have caused changes in the musculature and glands of the stomach to such an extent that months and years may elapse before the individual rates himself as normal. In one case, six months after operation, the gastric juice gave a total acidity of 105 and yet the patient complained of no distress and could comfortably digest any ordinary meal.

The differential diagnosis calls for much attention regarding gastric ulcer, chronic cholecystitis, gallstones and gastroptosis. The proper surgical interference gives better results than long-continued purely medicinal treatment. The usual secondary symptoms of faulty gastrointestinal chemistry included under autointoxications should not be overlooked.

34 Washington Street.

REMOTE EFFECTS OF TONSILLAR INFECTION.

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However much may be said of the tonsils as part of the system of the body's defense against bacterial invasion, the fact remains that this defensive function is easily overcome, especially in childhood, and once seriously interfered with it frequently does not regain its normal condition. Thenceforth it may be a positive menace to the body through its ready susceptibility to infection, or by the ease with which bacteria pass through its covering into the lymphatic channels beyond without marked reaction on the part of the organ. It is not my purpose to discuss whether the hypertrophied tonsil is a pathologic or physiologic result, whether it is Nature's method of increasing the defensive process or whether it is a pathologic hyperplasia from chronic and low-grade inflammation. It will be necessary to know far more about the function of the tonsil than we do now before these things can be decided. We do know that the tendency to alterations in the tonsils and to infections in them is greater in childhood than in adult life, and with this may be associated the peculiar susceptibility of children to air-borne infectious diseases. Certain it is that there is growing clinical and experimental evidence that the tonsils are the portals of entry for the infectious material in a wide range of diseases, among which are pericarditis, myocarditis, endocarditis, arthritis, chorea, neuritis, adenitis, glandular fever, nephritis, pleurisy, tuberculosis, iritis, phlebitis, osteomyelitis, various other streptococcus and staphylococcus septicemias, Hodgkin's disease, and possibly even certain forms of leukemia.

Packard has shown how difficult it is to estimate at all accurately the percentage of cases of heart disease due to tonsillar infection, but small groups of cases have been so frequently reported that the importance of this avenue of infection has been thoroughly exploited. Four years ago I reported[1] some typical cases illustrating this connection and reviewed the literature. In following the condition closely since then I have noted recurrent endocarditis following tonsillar infection in several of the old cases and two attacks of chorea following it in another. In still another both muscular rheumatism and joint involvement have become almost chronic after five years of repeated tonsillar attacks with and without heart recurrences. A curious systemic infection of tonsillar origin in which the heart was involved in a pericarditis is the following:

History.—J. M., aged 48, complained of bad sore throat, which showed small white spots. His temperature was normal. Twenty hours later pains began in hips, back and calves. They grew worse during that night, and the patient had chills all night. The following morning his temperature was 104 F., pulse 90, and respiration 28. No lung dulness, but a friction rub in the right axilla and catchy breathing. Nausea was marked. Consolidation of the right lower lobe next day and the upper lobe five days later. No crisis and gradual lysis. Temperature was normal on fourteenth day, a pericarditis was developed on the twenty-first day, and a pneumonia of the right middle lobe on twenty-fifth day. Abscess of the upper lobe on twenty-sixth day, which discharged freely five days later. Patient had asthmatic attacks on thirtieth day. Final recovery.

Following tonsillar infection an endocarditis with 1 to 3 degrees of fever continuing for months and even years has been a complication of a number of cases under my observation. This condition is so common an inci-

1. American Laryngological Society, San Francisco meeting, 1903.

dent in this city, where tonsillar infections are so frequent, that I am inclined to believe it one of the commonest causes of continued slight fever in children.

Nephritis after tonsillitis without rheumatism is a commoner complication than is generally supposed and has occurred four times in my cases. Morse reports it four times after brief observation, and concludes in consequence that it must be very frequent. A curious and complicated case illustrating this complication is worth recording:

History.—G. B. S., aged 50, had a severe sore throat March 2, 1906; pain all over the body; temperature ranged from 101 F. to 102 F. Urine examined that night showed a heavy cloud of albumin, 1013 specific gravity, 1 per cent. of sugar, no diacetic acid. The sediment contained a great many casts—hyaline, granular, epithelial and blood; many mucous cylindroids. There were also a great many red blood cells. There had never been sugar in the urine before nor was it found again. The patient progressed toward a definite acute nephritis. The case was further complicated by two weeks of acute mania toward the end of the nephritis.

General septicemia of tonsillar origin is, of course, uncommon, but its occurrence, even occasionally, is significant. In Senator's first reported case of acute phlegmon of the pharynx the infection was tonsillar and staphylococcic in nature. Since then attention has been called to the severity of staphylococcic infections through the tonsils, and one of my cases illustrates this:

History.—M. T., female, aged 38, had an acute angina three weeks after a slight plastic operation. So severe was the local infection and the constitutional manifestations that the matter was considered grave, and several physicians saw the patient daily. The course was rapid and death occurred on the sixth day from edema of the glottis. The blood condition early indicated a bad prognosis, for there was a rapidly increasing leucopenia reaching the low number of 149 on the day before death. This case was reported in full elsewhere. Autopsy showed general staphylococcus septicemia from abscess at the base of the left tonsil.

Streptococcic angina with marked cellulitis is fortunately also uncommon, and strangely enough not so serious in my experience as marked staphylococcic infection. The literature, however, contains many examples of systemic infection from it, and doubtless corroborative autopsy reports could be had more commonly if the subject were more carefully investigated.

Recently a few cases of leukemia have been reported where a tonsillar infection seemed probable. The uncertain nature of this infection makes it impossible to speak with certainty, but I am adding the history of a case to show how strong the presumptive evidence is. I am well aware also that clinical experience is often at variance with autopsy findings, and without autopsy it is unsafe to draw too many conclusions. In leukemia, however, we are not helped much by autopsy.

History.—I. N., male, aged 51, gave a history of frequent nosebleed for years and of severe sore throats. After one of these latter attacks a year previously, the glands in the cervical region began to enlarge and one suppurated and was operated on; a diagnosis of leukemia was made at the time. There was no marked change in his condition for a year, when suddenly he grew weak, developed a fever, and died in three weeks. I saw him twenty-four hours before death, at which time the tonsils were enormously enlarged and the cervical glands as big as walnuts. The tonsils so filled the back of the mouth as to impede breathing and swallowing. The sublingual glands were the size of chestnuts. The glands elsewhere in the body were the size of beans and not tender.

The most interesting recent development in our study of tonsillar infection lies in the frequency of its being the seat of a tubercular process, and the connection between tubercular tonsils and adenoids, and glandular and systemic involvement. Harbitz, in an extensive monograph on lymph node tuberculosis during childhood, refers to the striking oversight of this source of tubercular infection and admits that the percentage of cases so infected is 4 or 5. He states that this route of infection would assume relatively greater importance if the tonsils and cervical nodes were systematically examined by microscopic and inoculation methods. This is a fair and conservative statement of the situation, which, by reason of our indefinite knowledge of the tonsillar function, admits of speculation as to the value of the conclusions from investigations along this line. I refer particularly to the tonsillar absorption and injection experiments of Goodale, Kayser, Hendelsohn, Piera, Lexer, Grober and others. This work covers the following points convincingly:

1. Minute particles of foreign matter, dust, carmin and other pigment, when locally applied, are rapidly absorbed by the tonsils from the crypts, and are found easily in sections of tonsils removed as early as fifteen minutes afterward.

2. Bacteria do not pass so rapidly and are rarely recoverable in the tissue under ordinary circumstances.

3. Ordinary organisms are probably absorbed less rapidly partly on account of their mucous protection. They are promptly destroyed as soon as they enter the tonsillar parenchyma, unless able to resist this power of the tonsil. It is probable even in this case that their virulence is somewhat altered.

4. Virulent organisms follow the same course that dust particles and non-pathogenic or mildly pathogenic bacteria do and may cause local lesions, lymphatic involvment and lesions in any part of the body.

5. Tubercle bacilli may lodge and remain indefinitely in the crypts ready to be absorbed at any time. They are a constant source of danger, even though not involving the tonsil in actual disease.

Following on this is the hypothesis of Grober from work published in 1902, based on three experiments selected from a series of twenty-eight performed on animals. Under anesthesia china black in sterile emulsion was injected into the tonsils. At a later period, from a day to three weeks, the animals were killed and examined.

CASE 1.—A rabbit, killed a week after injection in one tonsil; black pigment found in the blood, behind the tonsil, and in the lymph glands on that side as far as the thyroid cartilage. The leucocytes in the lymph vessels contained pigment, but beyond the zone of the lymph vessels very little pigment was found.

CASE 2.—A dog, exsanguinated shortly after injection of 6.5 c.c. of sterilized emulsion of china black. The autopsy showed very little coloring matter in the leucocytes, none being found free in the blood. The tonsil and the loose connective tissue containing the afferent lymphatic vessels of the tonsil were of a deep black color. Along the muscles of the neck, as far as the hyoid bone, and to the median line, there were streaks of pigment. The pigmented area also spread downward below the hyoid bone, where it extended 1 cm. beyond the median line. The coloring matter was traced to the bony opening of the thorax and to the parietal pleura, which, when stripped off and examined by transmitted light, showed the black pigmentation. The lymph vessels of the paratracheal connective tissue and of the esophagus, as far as two or three cm. above the bifurcation of the trachea, were also colored; whereas, on the left or uninjected side no such phenomenon was found. All the lymph glands on the lateral wall of the pharynx, hyoid bone, larynx, along the deep vessels of the neck and supraclavicular fossa on the right side, were black. The parietal pleura at the apex showed an exudate, but no adhesion to the visceral pleura. The microscope showed that in all the above-mentioned positions

there were no other changes present. In the glands the coloring matter occupied the paravascular spaces. In the lymph vessels between the supraclavicular glands and the parietal pleura of the apex, there were a large number of leucocytes filled with coloring matter. Free coloring matter was also present in this region. In the apex of the lungs there were no signs of an inflammatory reaction. The coloring matter here seemed to be freely deposited within the connective tissue. In the abovementioned exudate at the apex there was coloring matter in the leucocytes.

CASE 3.—A small dog was placed under morphin narcosis and 5 c.c. of coloring matter injected into the tonsil (April 2, 1903). April 13 the same experiment was performed on the opposite side. May 10, the autopsy, after exsanguination, showed a large amount of coloring matter free in the blood, the leucocytes, the tonsil and connective tissue. The connective tissue of the neck on both sides along the larynx to the aperture of the thorax was colored symmetrically. The lymphatic chains along the large blood vessels, as well as those in the supraclavicular region, were deeply stained. The coloring matter was also found within the lymphatic vessel and in the paravascular spaces. A fibrous exudate was found at the apices of both lungs, thus forming a bridge of inflammatory material from the parietal to the visceral pleura. The coloring matter was also present in the exudate. The microscopic appearance of the apices presented a light grayish coloration. The glands of the mediastinum were stained on the left side, as were also the bronchial glands. In the left lung there were three other fibrinous exudates in which the coloring matter was present.

No confirmation of the findings in Cases 2 and 3 seems to have been made, nor, as far as I can find out, have they been attempted. The theory of apical infection by this route is certainly interesting, but seems improbable. The theory of direct respiratory infection of this less used and relatively unmoved part of the lung is certainly without proof and not very satisfying.[2]

Harbitz shows that the consensus of opinion in investigations of fifteen to twenty men, covering several thousand cases and corroborated by his own work, is that the respiratory tract is the seat of primary infection in two-thirds of the cases of tuberculosis under 15 years of age. The tonsil and cervical glands are either not considered or are classed with the digestive tract. The glands at the hilus and trachea are most commonly the seat of the primary infection, then the bronchial glands. The lungs themselves are infected secondarily in practically all cases and in the following ways:

1. Bronchial nodes rupture into a bronchus and a secondary caseous broncho-pneumonia is set up in the area of distribution of this bronchus.

2. Retrograde lymphogenic infection of lungs, invasion taking place from the hilus and proceeding along the lymph channels accompanying the bronchi, the intra-alveolar connective tissue becoming thus involved. Geill and others report ascending infection of cervical nodes.

3. Through the blood stream from lymph nodes in the chest or elsewhere.

4. Direct extension from infected lymph nodes which have broken down, and even when they are apparently intact.

It is only in adult life that one finds the less marked evidences of primary lymph node infections and apparent primary infection of the lung. Before considering the place which the tonsil may occupy in these glandular infections in the light of recent clinical and experimental investigation, I want to call attention to the fact that, as the tracheal and hilus glands are more frequently involved primarily than are the bronchial glands, there is a strong suggestive possibility that these infections may not be directly respiratory, but may be descending from the tonsils and cervical glands or ascending from the mesenteric glands. Autopsy records frequently point directly to this possibility, and the well-established latent character of the tubercular processes in cervical and mesenteric glands leads one to consider seriously this possibility in explaining a good deal of the adult tuberculosis. Autopsy records rarely include extensive investigation into the condition of the tonsil and cervical glands, which latter are shown to be involved many times more frequently than the mesenteric where comparative studies have been made (13 to 1 being the proportion Harbitz found in guinea-pig inoculations in his series). This fact leaves us in the dark about the point, but the evidence which I have mentioned and the experiments thus far recorded go to show that more and more connection is being established between this tonsillar-cervical route and lung tuberculosis. Brief reports of cases by Harbitz and Goodale will serve to illustrate.

History.—(Harbitz's case).—Girl, aged 13½, died of suppurative meningitis. Autopsy showed both tonsils and the cervical nodes enlarged and containing numerous tubercles. In the ilium and mesenteric nodes there were also groups of tubercles. The bronchial nodes were scarcely swollen. Miliary tubercles in the various internal organs.

History.—(Goodale's case).—Boy, aged 5, had shown one year previously enlargement of the cervical nodes on the left side, subsequently diminishing. During the month previous to consultation several of the nodes again became enlarged on the same side, the largest reaching the size of a hickory nut.

Examination.—This showed tonsils of normal contour and color, not enlarged or adherent to the pillars. The crypts presented no dilatation, and showed no evidence of retention of contents. A small, non-obstructive, pharyngeal tonsil was present. Under ether both tonsils and the adenoid were removed. The left tonsil on incision showed a central collection of puriform material in a cyst-like cavity. Within a few days the cervical glands on the left side became larger and were removed. The adenoid and left tonsil were examined microscopically by Dr. J. H. Wright, and inoculation made into guinea-pigs. The adenoid showed no evidence of tuberculosis either microscopically or by inoculation. The tonsil showed giant cells and tubercles microscopically. Inoculation into a guinea-pig was followed by tuberculosis of the spleen and lymphatic glands in the animal. Nearly two years later the child was again seen. Since the operation he had been perfectly well, without a return of the cervical adenitis until three weeks previous to this second consultation. At this time a small mass appeared near the scar on the left, soft and elastic. Examination of the throat showed no sign of the left tonsil. Some small granules were visible on the posterior pharyngeal wall, and a certain amount of lymphoid tissue was found at the site of the right tonsil. The cervical nodes on the left were removed and found to be tubercular.

Of nine cases reported by Goodale in this short series of systemic infections through the tonsils, six showed tuberculosis of the tonsils and cervical glands. Wood[3] reviewed the literature of tuberculosis of the pharyngeal and faucial tonsils and emphasizes this portal of entry of tubercular infection. The 1,671 cases which he collected showed that 88 or 5.2 per cent. were tuberculous. The variety of methods used in making the examinations destroys the value of these figures, as is shown distinctly by Lartigau's thorough review of the subject in 1902, and Goodale's report of his experiences in 1906, already referred to. Both authors show that histologic studies alone are incomplete, and that the percentage is more than doubled if systematic inoculation tests are

2. Since writing this article I learned of the careful investigation of the possibility of apical infection from the tonsil which is being carried on at the Phipps Institute in Philadelphia, on autopsy material. There seems to be increasing evidence of this manner of lung infection.

3. THE JOURNAL A. M. A., May 6, 1905.

made. Lartigau's painstaking and complete monograph makes plain the difficulty in an histologic examination, upward of 135 sections being examined in two cases before tubercle bacilli were found, and then only in small numbers. Twelve of his seventy-five cases gave positive results to animal inoculation, and it is fair to assume from the thoroughness of his work that this 16 per cent. of tubercular involvement of the pharyngeal tonsil represents the true condition more nearly than indicated by Wood's figures.

In the study of portals of entry of disease into the human body, the pharyngeal and especially the faucial tonsils have an importance not well enough recognized or understood, but increasingly appreciated in the light of each new clinical or experimental study.

Clinical Notes

ASIATIC CHOLERA, ITS PREVENTION AND TREATMENT.

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The following observations concerning the prevention and treatment of this dreaded and terrible disease are founded on practical experience and clinical work of Dr. H. Adamson, late inspector general of hospitals, and myself, in fighting this fatal disorder. There are few physicians outside of a limited number in India or Japan who have had the opportunity which we have enjoyed of studying this disease at close quarters for many years and in an enormous number of cases.

As a result of our experience we have learned that prophylaxis is sure and certain if proper measures are adopted and enforced. When we can control the food and water supply and secure reasonable sanitary conditions, wonderful results as to prevention are obtained. In my opinion, we need not fear a world epidemic of Asiatic cholera so long as we have competent medical men on guard to enforce quarantine regulations and to insist on sanitary precautions. We need not fear cholera so much as bubonic plague, since the prevention of the latter disease is far more difficult to attain.

Cholera of a severe type causes death very quickly, often within one or two hours after seizure. In milder cases death may result in from ten to thirty-six hours. Prompt treatment to overcome the following conditions is vital to success, namely, the profound toxemia, the dehydration of the body by loss of watery constituents of the blood, and the uremia from which a large proportion of the patients die.

One of the most important things in the treatment is to keep the blood serum where it belongs, namely, in the blood vessels. The method which we have successfully employed to that end will be referred to later.

In a large proportion of the severe cases shock and heart failure cause death, as in poisoning from cobra bite. Sometimes there is no bowel movement before death. Second in importance as the cause of death is the dehydration of the body already referred to. Third in importance after the shock is over is uremia, to overcome which proper methods must be employed.

The results which we have obtained by our treatment have proved so remarkable that we have received the thanks of many whose lives have been saved and who are now living and speaking testimonials of its efficacy. Some of the proudest moments of my life have been those in which I have received the expressions of sincere gratitude from patients whose lives have been saved.

The patient first receives from four to six tablets of the following formula:

Cocain hydrochlorid	1/20 gr.	003
Creosote	1/8 min.	0075
Cerium oxalate	2 gr.	13
Pepsin	1/4 gr.	016
Tincture of nux vomica	3/8 min.	022

This cocain combination, which is listed in the catalogues of the American manufacturing pharmaceutical houses as "Creosote Comp.," absolutely controls the vomiting in the larger proportion of cases. As just stated, from four to six of these tablets are given at once. The patient is instructed to chew them up thoroughly before swallowing.

Before going further I wish to say that all preconceived ideas of dosage must be abandoned in the active treatment of Asiatic cholera. Doses that would be prohibitory in the treatment of ordinary ailments must be given, and given promptly, for death is so inevitable, so sure, so quick and so frightful, that the question of life or death depends on the work of minutes, or in some instances on the work of seconds. The serum of the blood is being poured out into the stomach and intestines, and consequently to save life enormous doses must be given and given promptly.

From three to five minutes after the cocain compound, just referred to, one or two tablets of the following formula are employed:

Morphin sulphate	1/6 gr.	01
Hyoscyamus	1/8 gr.	008
Nitroglycerin	1/100 gr.	0006
Citrated caffein	1/2 gr.	032
Capsicum		
Camphor	of each 1/4 gr.	016
Tincture of digitalis	5 drops	3

The patient is directed to chew these tablets before swallowing them.

Every few minutes, until the pulse can be felt at the wrist, the tablet of nitroglycerin 1/100 minim with 2 minims of the tincture of digitalis is given.

As soon as the pulse is felt at the wrist, no matter how feebly, the prognosis becomes more favorable. Now is the critical time in the case, and he who hesitates is not lost, but he will certainly lose his patient unless he gives nitroglycerin and digitalis for effect. I have given as high as twenty or thirty tablets in the course of a few hours with splendid results.

In the meantime, the patient is given the following mixture:

Tincture of eucalyptus	4 fluidounces	120
Spirit of camphor	2 fluidrams	8
Tincture of capsicum	30 minims	1

This mixture is taken at one dose diluted with an equal quantity of water, and from teaspoonful to tablespoonful doses of tincture of eucalyptus are given concurrently with the other medicine every hour until reaction sets in. Mustard plasters and the application of heat to the body are not neglected.

These remedies stop the vomiting, produce reaction and aid in overcoming the toxemia. By stopping the vomiting the loss of serum by emesis is checked, but it is necessary also to check the enormous loss occurring from diarrhea.

To keep the blood serum where it belongs in the blood vessels of the body and thus prevent shock and dehydration, I used large quantities of tannic acid in a modified form. I used heroic doses and have given the equivalent of 120 grains (7.8 gm.) of pure tannic acid in twenty-four hours with the happiest results, giving it in 10 grain (0.65 gm.) doses after every bowel movement, or, oftener, 20 grains (1.3 gm.) every hour irrespective of bowel movement.

By stopping the loss of blood serum I control the shock which, in my opinion, is due in part to this loss. In fact, the patient is bleeding to death, not slowly but rapidly; and, in addition, is also experiencing the terrible shock of the toxemia.

A great many patients promptly react as a result of this treatment and then are attacked by suppression of urine which often occurs at this time. To fight this we employ the tincture of eucalyptus in addition to the digitalis and citrated caffein, which also act as diuretics.

The most vital thing in the treatment at this point is the absolute prohibition of food for thirty-six hours or longer. This prohibition must be absolute. I have known a relapse to occur after eating a slice of orange or a teaspoonful of soft-boiled rice. Why this should occur I do not know, but it is so. Vomiting and diarrhea at once recur and the patient dies quickly. Many deaths occur at this stage, especially among the Siamese, who can not be brought to understand that the symptoms will return if the smallest amount of food is taken.

The recovery is rapid unless complications occur. I have known cases in which the family informed me on arrival at the house that the patient was dead. Inside of a week the patient would be walking around, although very thin and feeble.

During the recent epidemic in the Malay Peninsula I attended hundreds of cases and met with the most gratifying results from the above treatment. The epidemic is now over, and my official returns show a death list of two thousand occurring within the past two months. Many of these patients might have been saved if they had been placed under the treatment which proved so efficacious in our hands. The treatment by saline transfusion has not proved satisfactory in this country. Many other forms of treatment have been tried without success. Opium is never given by us in the late stages unless it is accompanied by powerful cardiac stimulants.

Every year during the dry season we look for a limited number of cases of Asiatic cholera, but now that we have adopted proper precautionary measures we hope never again to have an epidemic.

In four and one-half years residence in Bangkok every European, man, woman or child, who was attacked by cholera and was treated by all other methods by the physicians of the city promptly died; a mortality of 100 per cent., not one recovered. When I showed my professional brothers that my patients, both European and native, did recover in a fair proportion I was curtly told that my patients "did not have cholera."

PERFORATION OF ILEUM BY WIRE SPIKE.

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MINNEAPOLIS.

The following case, which is of unusual interest in some respects, came into my service at the City Hospital.

This patient was operated on in June, 1906, by my colleague, Dr. A. E. Benjamin, who reported the case in the *Annals of Surgery*, February, 1907. At this time were removed from the stomach fifty-two nails and some glass pieces, the photo of which is here reproduced. His history, in brief, up to that time is as follows:

Patient.—E. W., aged 47, has been a professional nail and glass eater for twenty years without suffering serious inconvenience until February, 1906.

History.—Four years ago he had a moderately severe gastric hemorrhage, and for the past four months he has vomited considerable blackish fluid, and his stools have been black at times. He has lost 23 pounds and feels weak. Examination at this time showed marked dilatation of the stomach, the greater curvature being one and a half inches below the umbilicus, with marked tenderness in the epigastric region. A posterior gastroenterostomy was done and the nails, etc., removed (Fig. 1). The stomach was found indurated, especially at and near the pylorus, and there were multiple small scattered ulcers. Since this operation the patient has returned

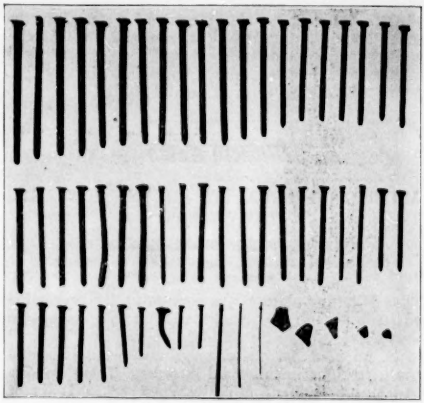

Fig. 1.—Nails and glass removed at the first operation.

to his evil tastes, and has on various occasions swallowed nails and other foreign bodies, and thinks that seven nails in all have been swallowed and none passed *per anum*. For the past three weeks he has had much pain in the lower part of his abdomen, and lately also tenderness low down in the middle line over the bladder.

Examination.—This shows a tender induration in the middle line about three inches above the pubes. Temperature ranges

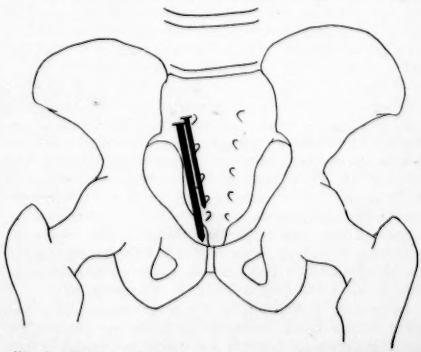

Fig. 2.—Tracing from *x*-ray plate showing apparent position of nails. Only the pelvic portion of the plate is shown.

from 99 to 100.5; pulse normal; urine normal. A skiagram shows two nails running vertically across the pelvis with the heads posterior (Fig. 2). No other foreign bodies can be located by the plate which covers the whole abdomen.

Operation.—Feb. 21, 1907. A low median incision showed the peritoneal cavity to be free from adhesions except low

down near the bladder, where the small bowel, three feet from the cecum, was adherent to the anterior abdominal wall. Within this adherent bowel the nails could be felt running forward to the abdominal wall and firmly fixed thereto. On breaking up the adhesions the larger nail was left behind firmly fastened in the abdominal wall by its point, while its head was still within the gut. This nail was pushed back, loosened and removed, and the opening in the gut sutured. The other nail had been displaced some eight inches toward the cecum, but was easily found and removed (Fig. 3). The whole abdomen was explored by the introduced hand, and no other foreign bodies could be found. The stomach was examined with special care, and no evidences of induration or dilatation were discovered.

Postoperative History.—Recovery was uneventful except for a colon bacillus abscess which developed on the sixth day and opened through the lower corner of the incision, apparently arising from the abdominal wall at the site of the nail puncture.

The nails removed were not corroded like those previously removed from the stomach, showing that they had undoubtedly passed directly by gravity through the gastroenterostomy into the gut.

The points of interest in this case are:

1. The rarity of the localization of such foreign bodies in the ileum, they generally lodging in the stomach or passing therefrom directly to the cecum, or later into the sigmoid flexure or rectum.

2. The unique feature of the passage of the rather blunt nail through the gut wall and at least half an inch into the abdominal wall without causing peritonitis

Fig. 3.—Nails removed from ileum, three-fourths natural size.

or even local abscess after remaining *in situ* for at least ten days.

3. The action of the gastroenterostomy in refusing harbor within the stomach to these nails, while before this operation all nails seemed to have been either retained or passed *per anum*.

Since writing the above report the patient, who had passed into the hands of my successor at the City Hospital, Dr. J. W. Little, showed some symptoms of intestinal obstruction.

Third Operation.—For this a third laparotomy was done above the umbilicus, and as adhesions were numerous and the conditions present obscure, a very long incision was finally made. No actual obstruction was found, but during the thorough examination a mass was discovered behind the stomach, apparently in the lesser peritoneal cavity and immediately in front of and adherent to the great vessels. This was carefully dissected down on, and twenty-eight corroded nails were found imbedded in inflammatory tissue.

These nails had apparently escaped from the stomach by perforation, probably before the first operation, as there were no evidences at the later operations or in the history, of recent stomach disturbances. Also the patient is certain that but seven nails have been swallowed since the first operation. It is now thought that the abdomen, at least, is free from nails and other foreign bodies.

A CASE OF ACTINOMYCOSIS OF THE PELVIS.*

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SYRACUSE, N. Y.

Actinomycosis is a rare disease in this country, and the following case will be of interest. It presents all the salient features of this disease:

History.—Mrs. S. of East Syracuse, born of American parents; had always lived in the city where her parents died at the ages of 75 and 78; one sister died during childbirth and one is living; three brothers are living, two have died, one as the result of an accident, the other of Bright's disease. She had always been strong and healthy up to the time of this sickness; usual weight 142 pounds. She was the mother of three healthy children, the youngest being five months old when she was first taken sick. Her food was that usual in the families of working people. About the middle of October, 1905, while ironing, she was seized with cramps in the abdomen. She sent for the family physician and after being in bed for a day was able to be about her work again. She had eaten some grapes that day and attributed her seizure in the abdomen to the fruit she had taken: but from this time on she noticed her health began to fail. She had occasional attacks of vomiting which left her weaker each time; nothing that was done could check the progress of her malady. About the first of December she was confined to the bed continuously with constant vomiting and general prostration. I saw her first December 26, She was much reduced in flesh with a marked cachexia. I called her attention to a lump in her side; she said that she had felt it but as it gave her no pain or did not inconvenience her in any way she thought no more about it.

Examination.—On December 29, 1905, she was admitted to St. Joseph's Hospital, of this city in a toxic condition. Dr. A. B. Miller saw her in consultation with me. Her temperature was 101 F., pulse 120 and she was very much prostrated and emaciated, the vomiting still continued and the bowels were very loose. At times she was able to retain small amounts of animal broths and albumin water. Physical examination showed that she was poorly nourished with cheeks sunken, complexion sallow and some abdominal tenderness. One mass was plainly discernible just to the left of the umbilicus and another in the left iliac fossa with areas which fluctuated on palpation. The liver and spleen were slightly enlarged. On vaginal examination a large tumefaction was felt, the physical signs of which denoted a pelvic abscess. The blood was examined: the red cells numbered 3,870,000, the white cells 4350. Hemoglobin was 37 per cent. The urine showed a specific gravity of 1.010 a trace of albumin, pus and a few round epithelial cells.

The patient's condition remained the same for three or four days; her temperature fluctuating between 99 F. and 101.6 F. The vomiting still persisted and there were from six to eight watery stools in 24 hours. On January 6, her condition not having improved, Dr. Miller opened the vaginal cul-de-sac and removed a large amount of fetid pus containing minute yellowish granules, a culture of which was sent to Dr. H. S. Steensland who promptly reported the inflammatory exudate taken from the cul-de-sac to contain *Actinomyces*.

The day following her temperature reached 102.6 F. and her pulse 120; the vomiting ceased. In a few days the vomiting returned, less marked at first. She continued gradually to fail, growing weaker and being unable to retain any nourishment by the stomach she finally passed into a comatose condition, her temperature reaching 103.6 F. She died on the twenty-ninth day after entering the hospital.

* Read before the Syracuse Academy of Medicine, April 7, 1907.

Hunger Days in Diabetes.—Naunyn and Tyson (*Progressive Medicine*) recommend "hunger days" for diabetics. The occasional interposition of a day during which nothing but tea and bouillon are allowed is very wholesome. When the sugar in the urine has been reduced to a minimum, this practice not only causes the sugar to disappear, but increases the limits of tolerance thereafter.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

103 DEARBORN AVENUE .... CHICAGO, ILL.

Cable Address . . . "Medic, Chicago"

Subscription price.....Five dollars per annum in advance

[*For other information see second page following reading matter.*]

SATURDAY, JUNE 15, 1907.

To give our readers a full report of the legislative proceedings of the annual session, we omit some of our regular departments and curtail the space usually given to others.

THE PRESENT STATUS OF CANCER RESEARCH.

A few years ago, when the malignant growths had been worked over from every standpoint possible to the anatomist, research in tumor pathology seemed to have reached a standstill. To be sure, individual efforts were being made here and there to establish some parasite or other as the cause of cancer, but these were for the most part made under unfavorable auspices and with dubious results, the great majority of trained pathologists looking askance at all such proceedings and taking only sufficient interest to point out damnatory errors and to condemn the entire subject. But an entirely new aspect has been assumed within the past few years, and there is scarcely a single field of pathology being more generally investigated at the present day than the biology of cancer. This change in attitude is due chiefly to the demonstration of the possibility of transplanting malignant growths from one animal to another of the same species, a process which brings the subject of tumor biology into the limits of exact research by methods capable of control, and permits the study of the etiology of cancer by men who are free from a preconceived opinion as to its parasitic or non-parasitic nature.

A pithy review of the subject of experimental study of cancer has recently been prepared by A. Dietrich,[1] which covers the entire subject in a judicious manner. Dietrich seems to see no reason for paying attention to any of the claims as yet put forth for a specific cancer parasite; the blastomyces of Sanfelice, the *Plasmodiophora brassicæ* of Podwyssotzky, the *Micrococcus neoformans* of Doyen, and all the rest, in his opinion, can be assigned to the scientific waste-basket as worthless rubbish. Kelling's notion that hen's eggs eaten raw furnish embryonic cells from which malignant growths arise, hardly needed the annihilation it received at the hands of the critics, even though its author did claim to find in tumors substances reacting with the specific precipitins for poultry proteins. Of more scientific value are the numerous attempts that have been made to produce tumors by the injection of embryonic cells and tissues, in investigation of the validity of Cohnheim's theory; but as yet no malignant growths have ever been produced by this means, although local teratoid masses have sometimes formed. B. Fischer's success in causing epithelium to grow in a striking epithelioma-like manner, in response to the stimulus of fat stained with scarlet R, has been mentioned previously in these columns. It may be granted that Fischer's results are the nearest reproduction of the genesis of carcinoma yet obtained by experimental means, but the growth thus formed ceases as soon as the limits of the stimulating substance are reached, and the epithelial cells never show the power of independent growth which is the essential characteristic of malignancy.

By far the most fruitful investigations of cancer yet made consist in the transplantation experiments with tumors primary in the domestic mammals, and with these our readers are familiar. The chief results so far obtained by these experiments are the following: Tumors arising in one species of animals can be implanted only into animals of the same species and not into other, even closely related species (e. g., mouse and rat). The most successfully transplanted tumors (mice cancers and lymphosarcoma of dogs) do not agree in all their features with typical malignant growths as they occur in man; nevertheless, it is generally conceded by all those who have made a study of these tumors that they are true malignant neoplasms. Although only a small proportion of tumors arising spontaneously in lower animals can be successfully transplanted, yet once transplantation is accomplished the virulence of the cells is usually increased by repeated passages, until nearly 100 per cent. of successful inoculations may be obtained. In all these experiments it has been found that living cancer cells must be transplanted to secure growths; ground cells, expressed juice and heated cells will not produce tumors; hence the process is actually a transplantation, or a metastasis from one animal to another, not an infection by some constituent of the cancer independent of the cells. All new growths produced by transplantation arise from the transplanted cells themselves, not from the cells of the host; the stroma of the implanted tumor tissue, however, dies out, and the stroma of the new growth comes from the connective tissue of the host. Under certain conditions the connective tissue stroma itself may assume malignancy, and so from implantation of carcinoma a mixed sarco-carcinoma, or eventually a pure sarcoma, may be obtained. Animals that have successfully resisted inoculation with tumors are generally immune to further attempts at inoculation, and their blood serum may be able to confer passive immunity to other animals;[2] furthermore, immunization against mouse blood or mouse embryos may protect against mouse cancers.

From this review of the work so far recorded, Dietrich

1. Deutsch. med. Wochschr., March 28, 1907, p. 495.

2. Clower: Brit. Med. Jour., Dec. 1, 1906, p. 1548.

finds no good evidence for the view that cancers, even those most easily transmitted from animal to animal, are due to parasitic invasion, a conclusion with which the majority of workers in this field seem to be in accord. The recent observation of spirochetal forms in transplantable mouse tumors, by Gaylord, does not seem to weigh against this conclusion, for Tyzzer has found similar structures in mice without cancers. The view urged so strongly by Ribbert, that the cancer cell itself is the parasite of cancer, seems to be almost beyond challenge in the light of the results of animal experimentation.

A CHRONIC TYPHOID FEVER PRODUCER.

An interesting and detailed account of an extensive investigation into the sources of a household epidemic of typhoid fever is given in THE JOURNAL this week by George A. Soper,[1] New York. Of eleven persons six developed typhoid fever between August 27 and September 3. Careful examination excluded the water, milk, vegetables, fruit and soft clams as possible sources. There were no cases in the town immediately preceding or following those studied and none of the patients had been away for several weeks before they fell sick, so that there could be no question but that the disease had been acquired on the premises, which, however, were found in a thoroughly hygienic condition. On August 4 a change of cooks had taken place and the new cook remained with the family for three weeks before and three weeks after the outbreak. An investigation of her previous career showed that, although the record for nearly two of the past five years has not yet been completed, twenty-six cases of typhoid, including one death, were associated with her services in seven families during this time. Indirect information indicated that she herself had had a mild attack. On March 11, 1907, the cook, who was a large healthy Irish woman, 40 years of age, was taken in charge by the Department of Health of New York City. The urine was found free from typhoid bacilli, but the stools showed great numbers practically every day for several weeks, and the blood gave a positive agglutination reaction.

Here we have a striking and instructive instance of the part a healthy, vigorous person may play as a chronic typhoid fever producer. The case also illustrates admirably the care and thoroughness necessary in order to discover the results traceable to bacillus carriers, whose rôle in the dissemination of typhoid fever must always enter into consideration now wherever the source of an outbreak is in any way obscure. Naturally such a person, especially if of unclean habits, can furnish rich opportunities for the transmission of the infection by the house fly and other more or less direct means.

It seems that of 1,700 persons examined at three laboratory stations in Germany, 3 per cent. were found to be chronic carriers. In the family infected by the cook in Dr. Soper's case the disease was confined mostly to servants, probably because other members of the family were protected in a large measure by the sterilizing effect of cooking, the food after that being handled by others than the cook.

Hand infection is important, of course, and scrupulous cleanliness clearly becomes an important safeguard against typhoid fever. Increased knowledge in regard to bacillus carriers is desirable because it is only through an acquaintance with the actual facts that we can determine on preventive measures that can be applied effectively.

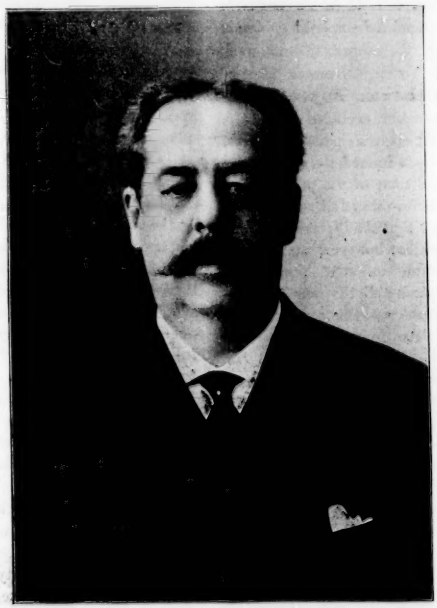
1. THE JOURNAL, June 15, p. 2019.

THE PRESIDENT-ELECT.

The sturdy fidelity of New England to the best interests of the profession and its manifold contributions to the science of medicine and surgery are fittingly recognized in the election of one of its brilliant sons to the presidency of the American Medical Association. True to heredity and tradition, the sons of New England have not hesitated to be pioneers in medical fields and many a new trail has been blazed by them. They have always been ready to give their best effort and to make sacrifices for the realization of ideals, for the elevation of standards and for the equalization of privileges. Any fit representative of such a noble section of our country must stand high in ideals, ability and attainments. Such a man is Herbert Leslie Burrell, President-Elect of the American Medical Association. Imbued with high ideals for the usefulness of the profession to the public, of notable ability tested in many a trying situation, and with a magnificent record of achievements behind him, Dr. Burrell well represents his part of the United States, and his position will emphasize to the New England men their recognized part in shaping the medical affairs of this nation.

Dr. Burrell has lived in Boston all his life, being born there April 27, 1856. He was educated in the schools of that city and was graduated from the Medical Department of Harvard University in 1879. After a few years in practice, desiring to take up the teaching of others in the principles and details which he had mastered, he became, in 1886, a demonstrator of surgical technic in Harvard University. He soon proved that his liking for this field of work was founded on a fitness and thorough preparedness for it, and he advanced in the faculty until he now holds a full professorship in clinical surgery, which at Harvard is a life position. In addition, he has given the systematic course lectures in surgery for many years. He is now senior visiting surgeon to the Boston City Hospital and surgeon to the Children's Hospital, as well as consulting surgeon to the Carney Hospital. For a number of years he was secretary of the American Surgical Association and is still a member of that body, as well as of the American Society of Clinical Surgery, the Boston Society for Medical Improvement,

the Boston Society of Medical Science and the American Association of Pathologists and Bacteriologists and other bodies. He was connected with the Massachusetts Volunteer Militia for many years, finally becoming surgeon general of Massachusetts in 1893. Taking charge of an office which needed reorganization, he established a model system and won much praise for his conduct of the medical affairs of the militia. In 1898 Massachusetts sent a hospital ship, the *Bay State*, with her troops to the Spanish-American War, and Dr. Burrell showed himself an efficient surgeon in charge. Another indication of his power as an organizer was as chairman of the Committee of Arrangements for the meeting of the Association in Boston in 1906. He gathered about him an efficient corps of assistants, all of whom worked together under a most remarkable system, each subcommitteeman being inspired by the masterful chief at the head to do his utmost for the perfection of the preparations for the meeting of the Association. The success in every detail, the harmony among this vast number and the elaborate preparedness for the meeting were subjects of remark by all who attended the Boston session.



DR. HERBERT L. BURRELL, BOSTON,
PRESIDENT-ELECT OF THE AMERICAN MEDICAL ASSOCIATION.

As a surgeon and an educator Dr. Burrell has taken a high rank. He was probably the first to make a successful ligation of the innominate artery. Others had reimplanted parts of trephine buttons, but Dr. Burrell was the first to reimplant successfully a whole one. He has spared no pains to perfect his technic. In medical education Dr. Burrell has pronounced views. As the head of the Association he may be expected to speak with no uncertain voice. He thinks that the public is entitled to good surgery. He has urged a retiring age for the surgeon, and on the other hand has called attention to the danger involved in one's taking up surgery after only a few weeks' service in a clinic or postgraduate school. He has favored increasing the elective work in the fourth year, and established a system whereby students serve as clinical clerks and surgical dressers during the senior year. This system has been looked on as a basis for similar work in other institutions. Another matter in which he was a pioneer was the establishment of an ambulance corps; he urged this in 1866, and Massachusetts was the first state to realize this important feature. Massachusetts thus became the entering wedge, and the ambulance corps has been established in other states as a consequence.

The educational line of work has received Dr. Burrell's greatest effort. He has been an earnest and persistent advocate of a continuous teaching service. He realizes the dependence of technic on an unbroken period of training and practice. Fearlessly following his conviction that the public is entitled to good surgery, he has labored to make a man's ability to teach the sole criterion by which to judge his value to the institution. Further, Dr. Burrell has urged the education of the public that it might be fixed in the minds of all that laboratories and research agencies are for the benefit of the people. He feels that it is their due to be informed on many points, and that this work lies at the door of the profession. The work of the Committee on Public Instruction will be strongly supported by Dr. Burrell, and he sees a bright future ahead in the cooperation between the profession and the public in the matter of research, public hygiene and prophylaxis.

THE THIRD ATLANTIC CITY SESSION.

For the third time in seven years the American Medical Association met this year at Atlantic City, N. J., and found it still an ideal place for a convention. Chicago was selected as the meeting place for 1908. In last week's issue part of the proceedings of the House of Delegates was published and the remainder appears in this issue. A careful index of the business considered is found on page 2068. The minutes of the general meetings are found on page 2065 of this issue, and the orations were given last week. Publication of the Sec-

tion articles begins in this issue and will be actively pushed.

HOUSE OF DELEGATES.

The House of Delegates held its sessions in the beautiful Observation Hall on the eighth floor of the Hotel Traymore. From this point of vantage an unsurpassed view of sea and land is presented, but this spectacle did not prevent the members of the House from accomplishing an enormous amount of work in the four days' session. The delegates assembled promptly at 10 o'clock on Monday morning and were soon in the midst of the business of the Association. Owing to the fact that most of the committee reports had been printed and, so far as possible, distributed before the meeting, and that some of the reference committees had been appointed and notified before the House convened, it was possible to transact, in the first day, much more work than has heretofore been done in that time. The reports of the various committees, especially of the standing committees and of the Board of Trustees, although long, had been carefully prepared and were read and discussed with much interest by the delegates. The enormous advantages of a small representative delegated body over the large general body which formerly transacted the business of the Association are now becoming apparent. The experience of six years has enabled the House of Delegates to get the machinery of its committees into good working order. The delegates now comprise a small body of thoroughly trained and representative men, from whom much in the way of effective work can be expected.

One of the most impressive features of the Atlantic City session was the character of the House of Delegates. A more splendidly representative body of men has never been gathered together in the history of American medicine. It is only necessary to look over the roll to recognize that the delegates from each state represented the highest and best of the profession. A thorough appreciation of their responsibilities, as well as a determination to act wisely and fairly, as representatives of the profession, was the evident aim of each member. The attendance was larger than that of any other session and practically all the members were present at every meeting. Complete unanimity and perfect harmony marked the entire session. This fact, coupled with the evident desire on the part of each delegate to transact the largest possible amount of business in the allotted time, enabled the House to do more business than at any previous session, and yet to adjourn over Wednesday so as to allow the delegates to enjoy some of the Section meetings. This has never before been accomplished, but it augurs well for the future.

SECTION MEETINGS.

The attendance at the Section meetings was perhaps larger than at any previous session. Some Sections report unprecedented audiences; for instance, in the Section on Laryngology and Otology the attendance at times numbered 500. In the joint meeting of the Sections on Practice of Medicine, Surgery and Anatomy and Pathology and Physiology, 2,500 gathered to listen to the symposium on goiter. Although more physicians attended the Boston session, there was also an extensive series of clinics and other attractions there; these were not found at Atlantic City, and the time was, therefore, free for solid scientific work.

THE EXHIBITS.

The Scientific Exhibit and the Commercial Exhibit were held in Marine Hall, the third building from the Boardwalk on Young's Old Pier. There had been some apprehension lest physicians would not take the trouble to go to see these exhibits. Any such fear, however, was speedily dispelled, as the attendance was large at all times. By a careful checking system it was found that more than 5,000 people visited these halls each day.

The Scientific Exhibit was a credit to those in charge and to those who furnished exhibits. They were arranged conveniently for examination and a carefully prepared series of demonstrations and lectures by prominent authorities was carried out. The Committee on Scientific Exhibit has made the excellent suggestion that, in subsequent years, awards of merit, in the form of medals and engraved certificates, be offered to stimulate competition in these exhibits. This excellent suggestion was referred to the Board of Trustees for action.

The Commercial Exhibit was thronged with physicians earnestly conversing with representatives of the various firms which displayed goods. For the first time this exhibit was under the exclusive control of the American Medical Association, and from it were excluded preparations which do not comply with the rules of the Council on Pharmacy and Chemistry. The names of most of the firms occupying space in the Commercial Exhibit were mentioned in THE JOURNAL, May 4. Many had taken great pains with their exhibits, and the whole effect was very pleasing. The success of this year's exhibit was very gratifying, and a continued effort will be made to enlarge on the historical, literary, scientific and artistic possibilities of the exhibit so as more than ever to draw the attention and interest of all medical men.

In this connection one must call attention to the most interesting display of the Philadelphia branch of the American Pharmaceutical Association. These pharmacists showed an array of elegant pharmaceuticals, put up in accordance with the U. S. Pharmacopeia and National Formulary. They were certainly attractive. Those in charge emphasized the fact that any competent pharmacist can prepare elegant and accurate products and urged that physicians cooperate by prescribing such articles. Another part of the exhibit made by the Philadelphia pharmacists consisted of various nostrums, some offered to the public, some offered to the profession, and some

offered to both, with comparisons made between their claims and the real facts as regards composition and therapeutic power. This exhibit was the center of an interested group all of the time.

THE WEATHER AND THE ENTERTAINMENTS.

It was a matter of congratulation that, after cloudy, rainy weather and after a severe gale on Sunday, Tuesday dawned clear, bright and warmer. Aside from a thunderstorm or two the weather during the session was satisfactory. There was not much sea bathing, as the water was too cold for comfort, but the weather was such that hotel piazzas and board walks were gay with the traditional parade of visitors. As a city pre-eminent in its facilities for the accommodation of guests, Atlantic City was praised on every side. The Committee of Arrangements had done its work well. The entertainments were of high class and thoroughly enjoyed. The president's reception, as is usual, was very largely attended and was the crowning social event of the session. All in all, the fifty-eighth annual session was a most pleasant and profitable one.

"VIAVI TREATMENT" AND A FREE PRESS.

In a recent number of THE JOURNAL[1] we abstracted the *California State Journal of Medicine's* exposure of the "Viavi treatment." Our enterprising western contemporary, at the time of publishing this article, sent marked copies of it to every San Francisco newspaper. Two papers—the *Call*, a daily, and the *Star*, a weekly—made some reference to it. Large advertisements immediately appeared in all the San Francisco newspapers extolling the "Viavi treatment." The newspapers themselves became aphonic on the subject of Viavi—except that the *Call*, apparently repentant for its modified outburst of free speech, published a complimentary write-up of the fraud and its promoters. As Viavi has not advertised in the press for years, the conclusion is overwhelmingly forced on us that the San Francisco papers have sold their birthright of freedom of speech for a paltry mess of advertising pottage.

Medical News

ARIZONA.

Personal.—Dr. Robert Ferguson, Bisbee, has gone to Massachusetts for a prolonged visit.——Dr. Henry J. Warner, Safford, is reported to be critically ill with erysipelas.——Dr. William M. Bell, Phoenix, returned from St. Louis, May 16.

Hospital News.—The members of the Nevada County Medical Society are considering the establishment of a sanatorium for consumptives near Prescott, and also a farm in the mountains where persons afflicted with consumption may make their homes, do light work and receive medical treatment.——The Odd Fellows are about to establish three sanatoria; one of these may be located at Safford.——Dr. Ray Ferguson, superintendent of the Territorial Insane Hospital, Phoenix, has ruled that patients whose minds are affected by drink or drugs shall not be admitted to the institution.

1. THE JOURNAL, April 27, 1907, 1445.

CALIFORNIA.

Communicable Diseases.—Scarlet fever and measles are said to be prevalent in Russiantown, Fresno. The inhabitants of this portion of Fresno insist on holding social and church gatherings, despite the quarantine rules, and as many of the women are employed in housework in American families, it is feared the diseases will spread.

Personal.—Dr. C. M. Johnson, El Cajon, was seriously injured in a fall from the steps of a trolley car in San Diego, May 5.——Dr. Frank Garcelon, Pomona, is reported convalescent from appendicitis.——Dr. Lemuel P. Adams has been appointed a member of the Oakland board of health, vice Dr. Frank L. Adams. Dr. Thomas A. Williams and Edward R. Sill have been reappointed members of the board.——Dr. George E. Goodfellow, San Francisco, has been appointed chief of the medical department of the Randolph lines, with headquarters at Guaymas.——Dr. Julian J. Benton has been elected health officer of Berkeley, vice Dr. George F. Reinhardt.——Dr. Samuel E. Simmons, Sacramento, has gone to Europe.——Dr. Gustavus C. Simmons, Sacramento, has returned after a year abroad.——Dr. F. E. Gallison, Mt. Bullion, has been appointed physician of Mariposa County, vice Dr. Hjalmer Kylberg, Mariposa.——Dr. Frances L. Newton has been made president of the reorganized board of health of Woodland.

IDAHO.

Smallpox.—Smallpox has again appeared in Wardner, where four cases are reported.——There are said to be about twelve cases of smallpox on Gold Creek and Crane Creek, east of Fresno.

Personal.—Dr. George E. Hyde, Rexburg, has been appointed a member of the State Board of Health.——Dr. William F. Howard, Pocatello, has been chosen secretary of the State Board of Medical Examiners.

Hospital Notes.—The hospital building of the Nez Perces County Poor Farm, Lewiston, was burned April 25. None of the patients was injured.——Dr. John W. Givens, superintendent of the North Idaho Insane Asylum, Orofino, states that a wing to the main building and an administration building will be erected this year.——A $1,000 *x*-ray machine has been presented to St. Luke's Hospital, Boise City, by a friend of the institution in Philadelphia. The new addition to the hospital is nearly completed, thus giving accommodation for 70 patients.

ILLINOIS.

County Secretaries Meet.—The secretaries of the component medical societies of the state, organized at Rockford, May 22, and elected Dr. C. Hubert Lovewell, Chicago, president, and Dr. Domer G. Smith, Elizabeth, secretary.

Military Surgeons Condemn Speaker Cannon.—The Association of Military Surgeons of the State of Illinois held its annual meeting in Quincy, June 6, under the presidency of the surgeon general, Col. Nicholas Senn, Chicago. The following officers were elected: President, Col. Nicholas Senn, surgeon general (re-elected); vice-president, Major Buell S. Rogers; secretary-treasurer, Lieut.-Col. Charles Adams (re-elected), and assistant secretary, Major S. C. Stanton (re-elected), all of Chicago. The association adopted unanimously the following preamble and resolutions condemning Speaker Cannon:

WHEREAS, A trained medical personnel of sufficient size is indispensably necessary to the welfare of the Army and Navy, as well as to the interests of the whole country; and

WHEREAS, A numerical insufficiency of both the Army and Navy Medical Departments exists, and is growing as a result of the adoption by Congress in 1901 of defective organizations; and

WHEREAS, Both the medical services above referred to have been rendered so unattractive by this unwise legislation as to render it impossible to fill them, there being 30 vacancies in the Army and 60 in the Navy, and every reason to believe these deficiencies will continually increase if present conditions continue; and

WHEREAS, The failure to correct the faults herein described rests with the Speaker of the National House of Representatives, inasmuch as he did not allow the bill to be presented to the House, although the Senate had twice passed the bill for the relief of the Medical Department and the House was willing to do so, and as he has shown a similar spirit as regards the reorganization of the Naval Medical Corps; therefore, be it

Resolved, That the Association of Military Surgeons of the State of Illinois hereby expresses its condemnation of the action of the Speaker in this matter, and holds him responsible for the present alarming shortage in the commissioned medical personnel of both the Army and Navy.

Resolved, That copies of this resolution be sent to the President of the United States, to the Governor of Illinois, to the Senators and Representatives of Illinois, to THE JOURNAL of the American Medical Association, to the *Military Surgeon* and to the Associated Press.

The semi-annual meeting of the association will be held in Chicago in December next.

Chicago.

Advisory Health Board.—The mayor has appointed the following advisory board to cooperate with the Department of Health on matters of hygiene and sanitation: Mrs. Marshall Field, Sr., Drs. Nicholas Senn, Frank Billings, William E. Quine, Charles E. Kahlke and C. Hugh McKenna.

Deaths of the Week.—During the week ended June 8, 574 deaths were reported, equivalent to an annual death rate per 1,000 of 14.20. The deaths numbered 69 fewer than for the previous week and 51 more than for the corresponding week of 1906. For the first time since the opening of winter pneumonia was not alone in leading death causes. The deaths from this cause and from consumption were each 74; from violence (including suicide), 50; from heart diseases, 47; from nephritis, 41; from nervous diseases, 31, and from cancer, 22. Diphtheria caused 8 deaths; scarlet fever, 6; typhoid fever, 4, and measles, influenza and whooping-cough, each 3.

Hospital Notes.—The Chicago Home for Incurables received $700,000 in bequests during the last six months, but still needs half a million dollars to erect the fifth section of the home and pay its running expenses. The home is now caring for 260 incurables.——Mrs. Keith Spalding has donated the Edward Sanatorium, Naperville, to the Chicago Tuberculosis Institute, together with $6,000 a year for its maintenance and $1,000 to build and equip an annex of six beds. At present the institution has 14 patients, of whom all but one are being treated free of charge.——The German Hospital will erect a new hospital building six stories in height, with 100 rooms for private patients, and to cost about $250,000.

KANSAS.

Topeka to Get Hospital.—The Sisters of Charity will erect on the property acquired at 1629 West Sixth Avenue, Topeka, a permanent hospital building, making improvements costing about $50,000.

Society Meeting.—At a meeting in Yates Center, April 30, at which the majority of the legally qualified physicians of Woodson County were present, the Woodson County Medical Society was organized by the adoption of the standard constitution and the election of the following officers: President, Dr. Daniel W. Maxson, Toronto; vice-president, Dr. Henry W. West, Yates Center; secretary-treasurer, Dr. Emerson K. Kellenberger, Yates Center; delegate to the state medical society, Dr. George W. Lee, Toronto, and censors, Drs. Mordecai D. Elder, Piqua, B. F. Browning and Henry W. West, Yates Center.

NEW YORK.

Appropriation for Cancer Laboratory.—The new state cancer laboratory, Buffalo, has been granted another appropriation of $20,000 by the legislature, for the continued investigation into the cause of cancer.

Commencement.—At the sixty-second annual commencement exercises of the University of Buffalo a class of 60 was graduated. The baccalaureate address was delivered by Prof. Jeremiah W. Jenks of Cornell University.

Bills Passed.—The Huth bill, prohibiting the transfer of dying patients from one hospital to another, has passed the senate.——The governor has signed the Miller bill providing that the town of Hempstead, Nassau County, may pay certain obligations due St. Joseph's Hospital at Far Rockaway for the care of town patients.

Saranac Industrial Settlement.—The Saranac Lake Industrial Settlement has been formed to give employment to persons who have reached the arrested stage in pulmonary tuberculosis and can no longer remain in institutions for incipient cases. It is desirable that this class of persons should not return to city conditions in order to support themselves, and to this end light employment along the lines of gardening, poultry raising, etc., are to be undertaken. Such a practical training in agriculture and handicrafts will make permanent means of support possible to those whose strength will not stand the strain of close confinement.

New York City.

Held in Quarantine.—Steerage passengers from the steamer *Kroonland* were detained at Hoffman Island for observation because of one case of a fever, the nature of which puzzled the health office.——The Holland-American steamer *Staatendam* had a patient suffering with smallpox and all the passengers in the same compartment were detained for observation.

Death Rate from Tuberculosis Reduced.—In 1881 the death rate in New York City from pulmonary tuberculosis for 1,000 was 4.27. It has steadily fallen until in 1906 it was only 2.16 per 1,000. In 1881, with a population of 1,244,511, there were 5,312 deaths from pulmonary tuberculosis, while in 1906, when the population had increased to 4,152,860, there were only 8,955 deaths from this disease, a decrease of less than 60 per cent. in deaths, while the population had increased almost 300 per cent.

Opium Sold Openly.—It has become known that owners of chop suey restaurants have been selling opium openly throughout the city. One Chinaman who was arrested claimed that he had the right to sell it under a section of the Penal Code, which states that no person should sell or dispense a poison unless it was so labeled and that his opium was labeled. The lawyer of the county medical society said that to be fully understood this section should be read in connection with the whole pharmacy law, of which this section is but a part. The pharmacy law provides that every person who sells poisons shall not deliver any poison without satisfying himself that it is to be used for a legitimate purpose and that the seller must also have a license to do so.

Contagious Diseases on the Increase.—The cold weather is supposed to be responsible for the increase in the contagious, infectious and general diseases in this city. Deaths from pneumonia have increased over this period last year, while those from tuberculosis have decreased. There were 392 deaths from tuberculosis for the week ended May 18, while for the same week of last year there were 437 deaths. For the week ended May 25 there were reported 494 cases of scarlet fever; for the week ended May 18 there were 469 cases. For the week ended May 18 there were reported 630 cases of measles; for the week ended May 25 there were 805 cases. There has been an alarming increase in the number of cases of cerebrospinal meningitis, the number reported for the week ended May 25 being 40. There has been a marked decrease, however, in the number of cases of typhoid fever; for the week ended May 25 there were 35 cases, while during the last week in March there were reported 120 cases.

MINNESOTA.

State Association Changes Date of Meeting.—The date of the annual meeting of the Minnesota State Medical Association has been changed from Tuesday, August 20, to Tuesday, August 13. The house of delegates will meet on Monday, August 12.

MISSISSIPPI.

State Medical Association Meeting.—In order to correct a misunderstanding, we announce that the report of the meeting of the Mississippi State Medical Association in THE JOURNAL, May 4, was not received from the secretary, but was compiled from other sources.

MISSOURI.

Crusade Against Tuberculosis.—The Missouri Association for the Relief and Control of Tuberculosis, which is affiliated with the National Association for the Study and Prevention of Tuberculosis, has been organized with the following officers and directors: President, Dr. George Homan, St. Louis; secretary, Robert J. Newton; treasurer, J. H. Lynch, and directors, Drs. William S. Allee, Olean; John M. Allen, Liberty; Irvin V. Barth, St. Louis; William M. Bayliss, Mt. Vernon; G. R. Blickhahn, St. Louis; Jefferson D. Brummall, Salisbury; J. Robert Buchanan, Nevada; Charles R. Buren, Princeton; Theodore A. Coffelt, Springfield; Leander W. Dallas, Hunnewell; Walter B. Dorsett, St. Louis; Gustav Ettmueller, Jefferson City; John Green, Jr., St. Louis; Robert D. Haire, Clinton; George Homan, St. Louis; Benjamin M. Hypes, St. Louis; Henry J. Jurgens, Edina; Frank J. Lutz, St. Louis; Rev. B. T. Kemmerer, St. Louis; Mr. J. H. Lynch, St. Louis; Drs. Walter E. McKinley, Denver; Enoch H. Miller, Liberty; Mrs. Philip N. Moore, St. Louis; Dr. Woodson Moss, Columbia; Mr. Robert J. Newton, St. Louis; Drs. Milton P. Overholser, Harrisonville; Edward E. Parrish, Memphis; William Porter, St. Louis; Edward W. Schauffler, Kansas City; Henry C. Shuttee, Westplains; Andrew R. Snyder, Joplin; Jonathan E. Tefft, Springfield; Charles H. Wallace, St. Joseph, and Louis M. Warfield, St. Louis. The work of organizing local societies is to be pushed rapidly and organizations will soon be perfected in Kansas City, Jefferson and Scotland County. The purposes of the association are:

Dissemination of knowledge concerning the causes, treatment and prevention of tuberculosis; investigation of the prevalence of tuberculosis in Missouri and the collection and publishing of useful information; securing of proper legislation for the relief and prevention of tuberculosis; cooperation with the public authorities, (state and local boards of health), the National Association for the Study and Prevention of Tuberculosis, medical

societies and other organizations in approved measures adopted for the prevention of the disease; promotion of the organization and work of local societies in all parts of Missouri; encouragement of adequate provisions for consumptives by the establishment of sanatoria, hospitals, dispensaries and otherwise; and in general to do all things and acts having as their object the relief of those afflicted with tuberculosis and the control and prevention of that disease throughout the entire state.

OHIO.

New Hospital.—The Robert Wright residence, Logan, a brick structure three stories in height, has been purchased by Drs. Murat H. Cherrington, Logan, and John S. Cherrington, Bidwell, for $6,500. The building will be remodeled and used as a hospital.

Contract Awarded.—A contract for the erection of the new state tuberculosis sanatorium at Mount Vernon has been awarded for $156,861.95. This includes the medical department, administration building, dining hall, bakery, scullery, serving rooms, kitchen, assembly hall and cold-storage rooms. The buildings are to be enclosed by Jan. 1, 1908, and to be finished six months later.

Commencements.—At the annual commencement exercises of the Miami Medical College, June 1, a class of 17 was graduated. At the banquet which followed Dr. Benjamin R. McClellan, Xenia, acted as toastmaster.——The annual commencement exercises of the Toledo Medical College were held May 21, when a class of eight received diplomas. The address of the evening was delivered by Dr. Dan Millikin, Hamilton. ——The Cleveland College of Physicians and Surgeons, the Medical Department of Ohio Wesleyan University, held its commencement exercises May 22, when a class of 16 was graduated. The address was delivered by Hon. Fred C. Rector of Columbus; the dean, Dr. Roland E. Skeel, delivered the charge of the graduating class, and President Herbert Welch of the university presented the diplomas.

Medical Libraries.—A great interest has been manifested in the proposition to establish a medical library in Springfield, and Dr. Thomas M. Reade is visiting the medical departments of public libraries in other cities in the interest of this enterprise. The plan is to get each physician or other interested individual to donate one magazine or book a year to the library, which is to be for the benefit of all practitioners. The committee for this purpose is composed of Dr. Clarence H. Kay, president; Dr. Noah Myers, vice-president; Dr. Thomas M. Reade, secretary, and Miss Alice Burrows, treasurer.——A committee of physicians consisting of Dr. Edgar J. March, president; John P. DeWitt, secretary, and Drs. George F. Zinninger, A. B. Walker and James Fraunfelter, has purchased the W. K. Miller residence, Canton, for $5,000. The building, when remodeled, is to be used as a medical library and clubhouse for physicians of the city.

OREGON.

Communicable Diseases.—Typhoid fever is reported to be epidemic at Elkton.——There are said to be 11 cases of smallpox at the lumber camp 17 miles north of The Dalles.——The epidemic of spinal meningitis, which has prevailed in Portland for several weeks, is subsiding, as only one new case has been reported during the week ended May 21.

PENNSYLVANIA.

Philadelphia.

Money for Tuberculosis Congress.—Dr. Lawrence Flick of the Henry Phipps Institute, announced June 4 that he had received $35,000 in subscriptions toward a fund of $100,000 which he is raising to meet the necessary expenses of the International Congress of Tuberculosis to be held in Washington in 1908.

Gifts to Woman's College.—Mr. William P. Sharpless, West Chester, Pa., has given $2,000 to the Woman's Medical College of Pennsylvania as a scholarship, to be known as the Frances Linton Sharpless scholarship fund, in memory of his late wife, who was an alumna of the college.——An anonymous gift of $2,000 has been received to be placed in the scholarship fund of the same institution.

Jewish Hospital Report.—At the annual meeting of the Jewish Hospital Association, the report presented for the year showed that the expenses had exceeded the income by about $12,000. One thousand five hundred and nineteen patients were treated in the general hospital, 102 in the Lucien Moss Home for Incurables, 132 in the children's wards, 11 in the infirmary for the aged, 200 in the Guggenheim building for private patients, and 12 in the isolation building. In the Mathilde Adler Loeb dispensary 4,950 cases received treatment. The total cost of maintenance was $103,252.15, or $1.67 5/6 per diem for the support of each patient.

Commencements.—Jefferson Medical College held its eighty-second annual commencement exercises June 3, when a class of 126 was graduated. The degrees were conferred by Hon. William Potter, president of the board of trustees. The prizes were awarded by the dean of the faculty, Dr. James W. Holland. The orator of the day was George Sumner Huntington, New York City, on whom the honorary degree of LL.D. was conferred.——At the twenty-fifth annual commencement exercises of the Medical Department of the Medico-Chirurgical College, May 31, the doctorate address was delivered by Dr. John A. Witherspoon, Nashville, Tenn.; the degrees were conferred on a class of 38 by President Henry F. Walden of the board of trustees, and Dr. James M. Anders delivered the doctorate address

Site Chosen for Phipps Hospital.—It is stated that a site for the permanent home of the Henry Phipps Institute for the Study and Treatment of Tuberculosis, which is now located at 238 Pine Street, has been secured. The new hospital which it is proposed to erect and which is made possible by the munificent gift of $1,000,000 by Mr. Henry Phipps, is to be located at the northeast corner of Seventh and Lombard Streets. It will overlook Starr Garden Park and will be in the heart of a district long ravaged by tuberculosis, and largely populated by Italians and Russian Jews. The hospital will be erected on the most modern plan and will require an expenditure of probably $300,000. It is stated that Mr. Phipps in addition to defraying the cost of the erection of the building, will provide sufficient income to make the institution self-sustaining.

Post-Session Clinics and Banquets.—The elaborate schedules of clinics planned in Philadelphia before and after the session of the American Medical Association offered great opportunities to visitors to see special work demonstrated and to hear lectures on various branches. Most of these schedules were announced in THE JOURNAL, giving an idea of the scope of the clinics. A special event was the opening of the new Jefferson Medical College Hospital, Philadelphia. A picture of this hospital and the adjoining buildings was given in THE JOURNAL, May 4. The clinics were conducted not only by the most prominent men of Philadelphia and other American surgeons who were invited to assist, but by a number of distinguished foreign guests of the American Medical Association. Other clinics were held in New York. In Philadelphia also a banquet was given in honor of ex-President Bryant and President Burrell of the American Medical Association, and the officers of the Pennsylvania, Delaware and New Jersey state medical societies. At this occasion the Medical Club of Philadelphia was the host.

SOUTH DAKOTA.

Hospital Incorporated.—Articles of incorporation have been filed by the Fort Pierre Hospital Association with a capital of $15,000.

Personal.—At the reorganization of the State Board of Health, at Mitchell, Dr. Horace A. Peabody, Webster, was elected state superintendent, vice Dr. DeLorme W. Robinson, Pierre.——Dr. Frank S. Howe, Deadwood, has succeeded Dr. Alfred G. Allen, Deadwood, as a member of the State Board of Medical Examiners.——Dr. Evert Rodenhuis, Harrison, who has been ill for several weeks, is now convalescent.

TENNESSEE.

Society Meetings.—The West Tennessee Medical Association held its annual meeting at Jackson, May 16 and 17. The following officers were elected: President, Dr. Herman Hawkins, Jackson; vice-president, Dr. John T. Allen, Brownsville, and secretary-treasurer, Dr. Isaac A. McSwain, Paris.——The twenty-sixth annual meeting of the Middle Tennessee Medical Association was held at Murfreesboro, May 16 and 17. Dr. Richard Douglas, Nashville, was elected president; Dr. Enoch H. Jones, Murfreesboro, vice-president, and Dr. William Litterer, Nashville, secretary-treasurer. The society will hold its next meeting in November at Nashville.

TEXAS.

To Watch Suspects.—The State Health Department is preparing a system whereby records will be kept of passengers entering from Texas from possibly infected localities of Mexico, and Central and South America. The names and destinations of these individuals will be ascertained by the inspectors at the ports of entry and notification will be sent to the health officers at the places of destination.

Hospital News.—At a meeting of the King's Daughters, held in Temple, May 22, a motion was adopted pledging the society to construct a new addition to the Charity Hospital. Temple, operated under their auspices, to cost $10,000. Ten towns in Bell County, through their public officials and clergymen, will be asked to raise $1,000 each as a permanent endowment for one bed in the hospital.——Drs. Phil. R. Simons and Perry, Strawn, propose to erect a large sanitarium and hospital at Mineral Wells.

Smallpox.—A case of smallpox is reported from Seguin.——The mayor of Fort Worth has issued instructions strictly to enforce the regulations concerning smallpox, which provide that any person concealing the fact that anyone has smallpox or who fails to obey the directions of the city physician or health officer, will be subject to a fine of from $10 to $100.——Three patients, ill with smallpox, and one suspected of having the disease, were discovered on the North German Lloyd steamer *Hannover* at Galveston, May 20. The patients were taken in a screened ambulance to the Sealy Hospital annex.

UTAH.

Personal.—Dr. Ralph V. Chamberlain, dean of the University of Utah, Medical Department, Salt Lake City, has resigned.——Dr. Ephraim G. Gowans, professor of anatomy at the University of Utah, has resigned.

Improvements in University Medical School.—The dean of the University of Utah, Department of Medicine, Salt Lake City, announces a number of improvements. The bacteriologic laboratory is to be doubled in size and entirely refurnished. A lecture room for the course in anatomy will be erected with accommodation for 40 students. Separate laboratories will be erected for students of histology, embryology and pathology, as well as a large new botanical laboratory. A course in advanced zoology will be introduced.

VIRGINIA.

Society Meeting.—At the semi-annual meeting of the Medical Society of Northern Virginia, held in Alexandria, May 23, the following officers were elected: President, Dr. Tunis C. Quick, Falls Church; vice-presidents, Drs. George Tully Vaughn, Washington, and Frederick M. Brooks, Swetnam, and secretary, Dr. Avery A. Rittenour, Alexandria. The next meeting will be held November 15 at Warrenton.

WASHINGTON.

Influenza Epidemic.—The Indians of the Tulalip Reservation, Snohomish County, are reported to be dying off rapidly from influenza. Nearly 100 deaths have resulted from the disease.

License Revoked.—The State Board of Medical Examiners on May 20 is reported to have revoked the license of Robert B. Clarke, Seattle, charged with employing drummers to solicit business for him.

Personal.—Dr. William M. McCoy, Wenatchee, has purchased a site and approved plans for a hospital.——Dr. E. Van Zandt, formerly superintendent of the Western Washington Hospital for the Insane, Fort Steilacoom, has returned to Seattle from New York.——Dr. T. O. Cole, Kahlotus, has been appointed assistant district health officer.——Dr. James A. Durrent, Snohomish, has been appointed a member of the State Board of Medical Examiners.——Dr. Emil Bories, Seattle, is reported to be critically ill at Vancouver, B. C.——Dr. James B. Eagleston, Seattle, and Dr. Elmer D. Olmsted, Spokane, have been reappointed members of the State Board of Medical Examiners.

WISCONSIN.

Smallpox.—The Fourth Ward school at Eau Claire has been ordered closed on account of the prevalence of smallpox.

Blow to Sterilization Bill.—The opponents of the Elver sterilization bill won a victory by defeating a bill providing for the payment to members of the board of examiners of idiots, imbeciles and epileptics, not to exceed $1.000 a year.

Must Have Physician.—Dr. John B. Spalding, health officer of Kenosha, is reported to have sent out notices that the parents and guardians of children, treated by faith healing and prayers, would be held strictly to account for fatalities which might result. During the past two or three years several people have died in Kenosha without medical attention.

GENERAL.

Health Conditions in Panama.—The official report of the Canal Zone for March shows that only 23 men out of every 1,000 were excused during the month on account of illness or any other cause. Yellow fever no longer exists on the Isthmus and malaria is the only disease which is at all prevalent.

Marine-Hospital Service.—A board of officers will meet at the Bureau of the Public Health and Marine-Hospital Service, Washington, D. C., July 15, at 10 a. m., to examine candidates for admission to the grade of assistant surgeon to the Public Health and Marine-Hospital Service. Candidates must be between 22 and 30 years of age, and graduates of reputable medical colleges, and must furnish testimonials. The examination is to be physical, oral, written and clinical. For invitation to appear before the board application should be made to the Surgeon General, Public Health and Marine-Hospital Service, Washington, D. C.

Hydrotherapists Meet.—A conference of physicians interested in hydrotherapy was held at Atlantic City, June 4. Dr. Simon Baruch was called to the chair and Dr. Frank E. Brown appointed secretary. Representative physicians from several states discussed the importance of furthering the study, teaching and practice of hydrotherapy and other physiologic methods. A committee, consisting of Professors Hare of Jefferson, Thayer of Johns Hopkins, Baruch of Columbia, and Dr. F. E. Brown of Baltimore, was appointed to formulate a symposium on these subjects for the next meeting of the American Medical Association.

Society Meetings.—The annual meeting of the Chicago & Alton Railway Surgeons' Association was held in Jacksonville, Ill., May 17, and the following officers were elected: President, Dr. Carl E. Black, Jacksonville, Ill.; vice-presidents, Dr. Matthew W. Pickard, Kansas City, Mo., and Edward H. Higbee, Roodhouse, Ill., and secretary, Dr. Miles B. Titterington, Jerseyville, Ill.——The annual meeting of the White River Medical Association was held in White River Junction, Vt., May 21, when the following officers were elected: President, Dr. Henry C. Jackson, Woodstock, Vt.; vice-president, Dr. Frederic Von Tobel, Lebanon, N. H., and secretary and treasurer, Dr. Marion L. Bugbee, White River Junction, Vt. At the close of the meeting the annual banquet was held at the Gates Memorial Library. Dr. John M. Gile, Hanover, N. H., acted as toastmaster.

CANADA.

New Society.—The St. Catherines (Ont.) medical men have organized a medical society with Dr. Joseph G. Sutherland, president, and Dr. John P. Armour, secretary. All have pledged themselves not to do lodge practice.

Personal.—Dr. Georgiana Urquhart has been appointed medical inspector of schools in Vancouver.——Drs. D. A. Stewart and R. B. Mitchell, having each served one year in the Winnipeg General Hospital, have been appointed senior internes.——The following graduates have recently been appointed as resident medical staff in the same institution: Drs. Andrews, Boardman, McGregor, McDonald, McArthur, Stewart and Armytage.——Dr. Walter M. English, London, Ont., has succeeded Dr. James Russell as superintendent of the Asylum for the Insane, Hamilton.

Samaritan Hospital Staff Elected.—At the annual meeting of the Samaritan Hospital for Women, Montreal, the following staff was elected: Consulting physicians, Sir James Grant, Ottawa, and Herbert L. Reddy, Montreal; surgeon-in-chief, Dr. A. Lapthorn Smith; surgeon, Dr. S. Fairweather Wilson; assistant surgeons, Drs. Albert Johnston, E. Cazalet Feilde, George S. Hall, J. Clarence Sharp, Walter H. Smythe, H. B. W. Carmichael, George A. Browne and J. J. Ross; pathologist, Dr. James A. Williams; laryngologist, Dr. George T. Ross; registrar, Dr. J. Leslie Allan, and anesthetists, Drs. Howell and Donnelly.

Hospital News.—The annual report of the Victoria General Hospital, Halifax, N. S., states that during the year 1,434 patients were admitted, 885 male and 549 female.——A new hospital has been established at Van Anda, B. C., with accommodation for 12 patients, in connection with the Columbia Coast Mission, which already has a hospital at Rock Bay, and operates a mission hospital ship, the *Columbia*.—The new Western Hospital building in Montreal is about to be formally opened. The first building was erected in 1872 and was for special work alone. It became a general hospital in 1894. The cost of the new building was $75,000.——The new tuberculosis sanatorium for British Columbia is on the lines of the plans of Mr. Latham, who won the king's prize. It will provide accommodation for 40 patients. It will be crescent shape, with a sun-room at each end.——The question of founding a Scandinavian hospital in Winnipeg is under discussion.

Provincial Society Meeting.—The Ontario Medical Association held its twenty-seventh annual session in Toronto on May 28 to 30. Dr. George A. Bingham, Toronto, was the president, and Dr. Charles P. Lusk, Toronto, acted as secretary. The address in medicine was delivered by Dr. Mazyck P. Ravenel, Philadelphia, and dealt with the methods of infection in pulmonary tuberculosis. The address in surgery was delivered by Dr. George W. Crile, Cleveland, Ohio, on "Clinical and Experimental Observations on the Direct Transfusion of Blood." It was decided to meet next year in Hamilton. Dr. Ingersoll Olmsted, Hamilton, was elected president; Dr. Herbert J. Hamilton, Toronto, vice-president, and Dr. Charles P. Lusk, Toronto, secretary. The social part of the meeting included a smoking concert on the evening of the first day, at which Dr. James F. W. Ross, Toronto, gave a lantern demonstration of a trip through Egypt, and the annual banquet on the evening of the second day.

FOREIGN.

Moving Pictures Injurious to Eyes.—The cable states that the police in Berlin are making war on moving picture shows as medical authorities assert that they are injurious to the eyes. There are 200 cinematograph theaters in Berlin and its suburbs. The incessant movement of the films is regarded as especially harmful for children's eyes.

German Medical Study Trip for 1907.—The annual trip of German physicians to the health resorts begins this year, September 6, at Berlin. The party will proceed to the watering places along the shore of the Baltic, stopping also at Stockholm and Copenhagen. Further particulars can be learned on application to Dr. A. Oliven, Luisenplatz 2-4, Berlin, Germany.

Yellow Fever in Central America.—Three cases of yellow fever are reported by Acting Assistant Surgeon Wailes, as having occurred at Gualan, Guatemala, one of them having resulted fatally. Gualan is about 90 miles inland from Puerto Barrios. This port has established quarantine against the interior and is free from intection, but passenger traffic has been suspended.

Patenting of a Drug No Guarantee of Its Therapeutic Efficiency.—The Berlin chief of police has published a warning that the patenting of a drug, method or trade-mark is a formality which has nothing to do with the therapeutic efficiency of the drug or method. The proprietary and "patent medicine" manufacturers in Germany have been wording some of their announcements in such a way as to make it seem that the obtaining of a patent is a government guarantee of the therapeutic value of the article in question.

Garré Succeeds Bier at Bonn.—It is less than two years since Karl Garré left the chair of surgery at Königsberg to take Mikulicz's vacant chair at Breslau, and he has now accepted a call to Bonn to take the place left vacant by Bier's removal to Berlin as successor to von Bergmann. Garré was born in Switzerland in 1857, but he has been a professor of surgery in Germany since 1888. He has taken von Bergmann's place as the head of the trio publishing the *Centrbl. f. Chirurgie.* F. König of Berlin and E. Richter of Breslau are the other members of the trio.

Proposed Bengal Hospital for Insane.—A new hospital for the insane of the province of Bengal has been proposed which will supersede the institution recently built for that purpose. The new hospital will be built according to plans in keeping with the most modern conception of psychopathic treatment. It will accommodate about 700 male and 200 female patients, and will be so situated and constructed as to admit of considerable extension. One of the features of the institution will be the absence of enclosing walls and the various cottage and villa wards will be set in ample grounds. This will do away largely with the feeling of restraint and detention.

"Children's Hospital" Day in Copenhagen.—Once a year in Copenhagen several thousand mite boxes are distributed to responsible young women and they patrol the streets soliciting contributions from every passerby. Nearly $30,000 has been collected in this way for the children's hospitals and asylums during the four years since the custom was inaugurated. May 7 was the date appointed this year, and the thousands of young women on the streets for this purpose, smiling and jingling the pennies in their mite boxes to attract attention, make the day seem like an Italian carnival. The scheme originated, the *Lancet* says, with Dr. Carlsen of Copenhagen, and it is now being introduced into other towns in Denmark and Sweden.

Havana Has a Finsen Light Institute and Department for Phototherapy in General.—Dr. D. Roldan was commissioned by the Havana medical faculty to install a department for phototherapy in the Mercedes Hospital. After a trip to Europe to study the best methods, he has equipped the new department with the most approved apparatus, including one for a Finsen-light treatment of four patients at a time. One of the two Roentgen apparatus is designed exclusively for treatment of cancer. The *Revista de Med. y Cir.* for May 25 states that on the occasion of the inauguration of the new department, Roldan's former pupils presented him with a silver plaque as a souvenir, and the French government sent him the cross of the Legion of Honor.

International Congress for Psychiatry, Neurology, Psychology and the Care of the Insane.—As already mentioned in these columns, this congress will convene at Amsterdam, Sept. 2-7, 1907. Representatives of the Dutch government are taking an active part in the preparations for the congress and the annex exhibition, in cooperation with the leading physicians of the Netherlands. The professor of psychiatry at Leyden, G. Jelgersma, will preside, with W. P. Ruysch, chief of the national board of health, as vice-president. Dr. D. M. van Londen is chairman of the committee on hotel accommodations. The general address of the secretary and various committees is Prinsengracht 717, Amsterdam. The membership fee is $4. Communications for the congress must be received not later than July 15 to be included in the official program.

Appointments at the University of Manchester.—It has been decided to appoint lecturers on economic zoology and economic botany at the University of Manchester. The *Lancet* states that they will investigate the life history of animal and vegetable pests and will inquire into definite instances of damage done by the pests. The work is in many respects analogous to that carried on in the fields of bacteriologic research by the public health departments of the university. Improved facilities for teaching experimental psychology are also being considered by the university authorities, and the appointment of a teacher is only awaiting the possession of sufficient means. It is thought that this appointment will have an important influence on the investigation of mental and nervous diseases and likewise on the study of the conditions of school life and the mental and physical development of children.

Anti-Alcohol Congress.—The Eleventh Anti-Alcohol Congress will be held at Stockholm, Sweden, July 28, 1907. These meetings, held in different cities of Europe during the last few years, have assumed international prominence. The Swedish government, through its state and educational departments, has taken full control of this congress and formally invited the United States, Canada and every country in Europe to send representatives and eminent persons interested and acquainted with the subject. The State Department at Washington has appointed as delegates to this congress, for the government, Surgeon-General O'Reilly of the U. S. Army, and Medical Inspector Beyer of the Navy, Drs. T. D. Crothers of Hartford, Conn., and T. A. McNicholl of New York, to represent the medical profession, and Mr. D. A. Hockhart of Hartford, Conn., to represent the temperance organizations and the Swedish people of this country.

International Congress for Anatomy.—Representatives of the leading anatomic associations of the world gathered at Würzburg, in Germany, during the last week of April. Romiti of Pisa presided, and numerous communications were presented showing progress in all lines of comparative anatomy and embryology, and general microscopic and macroscopic human anatomy and embryology. The congress was under the auspices of the German *Anatomische Gesellschaft*, forming its twenty-first annual meeting. Four vice-presidents were elected, who will preside in turn at the annual meetings—Waldeyer of Berlin, Ebner of Vienna, Stöhr of Würzburg and Nicolas of Nancy. Stöhr is Kölliker's successor at Würzburg, where his assistants are Schultze, Sobotta and Sommer. They have at their disposal the remarkably well-equipped Institute of Anatomy with its unusual collections of specimens and works on anatomy, the Würzburg faculty having made rather a specialty of anatomy under Kölliker's leadership. The *Presse Médicale* for May 22 has a good report of the congress.

Early Local Reaction to Tuberculin a Sign of Tuberculosis.—At a meeting of the Berlin Medical Society, May 8, von Pirquet of Vienna described a new method of applying tuberculin for the diagnosis of tuberculosis. He noticed in vaccinating against smallpox that persons who had been previously vaccinated presented an antibody reaction, a small papule at the point of the inoculation, which appeared within the first twen-

ty-four hours, but generally vanished by the end of the week. This papule never developed in persons vaccinated for the first time. The same phenomenon occurs in tuberculosis. A few drops of tuberculin applied to the arm and scratched in, like vaccine virus, causes the production of a papule in a day or so, in case of the presence of a tuberculous lesion anywhere in the body. This does not occur in the absence of a tuberculous lesion or in case of such debility that there is no production of antibodies. This early specific reaction was found most marked in his experience in patients with tuberculosis of the bones and scrofula.

Cost of Free Sanatorium Treatment of Tuberculosis in Germany.—The *Deutsche med. Wochschr.* for May 9 states that the central office at Berlin in charge of the system of compulsory insurance of wage-earners against sickness reports that in 1905 56,420 persons were given a chance to recover their health in sanatoria or other health institutions at a total cost of about $3,610,000, nearly $500,000 more than the year before. The total expense during the last five years, for 218,163 persons, was nearly $16,000,000. Of the total number treated during 1905, 47.56 per cent. had tuberculosis. More than half of all the working men who became incapacitated by sickness under 35 suffered from tuberculosis, and two-thirds of all those between 20 and 24. This does not apply to farm hands, but more than 37 per cent. of the incapacitated under 24 among them suffer from tuberculosis. During the year, 411 men and 38 women were given a course of treatment for venereal disease, and 55 men and 2 women for dipsomania. As a cause of incapacity, tuberculosis takes the third place among the male policy holders and the second place among the women.

Mortality in Prussia During 1905.—The Prussian statistics for 1905 show that tuberculosis heads the list as a cause of mortality with 9.68 per cent. of the total mortality of 726,679. Pneumonia follows with 7.82 per cent. Nearly 26 per cent. of the total mortality was due to infectious disease. Whooping cough was responsible for 1.83 per cent. of the total mortality; diphtheria for 1.65 per cent.; scarlet fever for 1.02 per cent.; measles for 0.87 per cent., and typhoid fever for 0.38 per cent. The number of women who died in childbirth was 3,963, or 0.55 per cent. of the total mortality, a considerably higher mortality than from typhoid fever. Only 10 persons succumbed to smallpox, 12 to hydrophobia, 18 to anthrax, and none to trichinosis since 1902. The proportion of deaths to 10,000 population was about 27.61 for affections of the digestive organs; 20.36 for old age; 19.13 for tuberculosis; 15.45 for pneumonia; 13.04 for affections of the heart or vessels; 12.4 for congenital weakness or deformities; 11.87 for apoplexy and nervous affections; 6.99 for cancer and other tumors; 3 for trauma or violence; 3.62 for whooping cough; 3.27 for diphtheria; 3.03 for affections of the urinary and sexual organs; 2.07 for suicide; 2.03 for scarlet fever; 1.74 for influenza, and 1.71 for measles. Epidemic cerebrospinal meningitis claimed 2,521 victims, all but 357 being under 15. The above figures from the official records are republished in the *Deutsche med. Wochschr.* for May 9.

Campaign Against Dust.—A congress of climatotherapy and urban hygiene has just been held at Nice, France, with more than 700 in attendance. The most important progress realized by the congress was the study of means to suppress dust. The *Progrès Médical* has a timely editorial on the subject, commending the campaign which Guglielminetti has been waging for years on behalf of the application of crude oil to roadbeds. He was able to present evidence which proves that the method costs but little more than a cent a square yard, while it renders the roads more resistant and saves repairs, with entire suppression of dust. The editorial adds that mothers who would not allow a spot on the dress of a daughter, and who take the train at once when a case of typhoid or diphtheria is reported where they are stopping, yet never think of keeping their children away from dust, and allow them to play in dust rising from soil which has collected the sputa of consumptives, the vomiting of children with whooping cough, scales of scarlet fever and other unspeakable things. The children breathe these things and carry them to their mouths and inflamed gums, but we are all so accustomed to dust that we never give it a thought. If it were not for the slight resisting power of many germs, epidemics would be even more frequent than they are. The automobile whirls up such clouds of dust that some of the resorts along the Mediterranean are becoming uninhabitable and are losing tourist custom. Consequently, the question of suppression of dust is a vital business matter with them, and the reports at the congress show that practical results are being realized.

LONDON LETTER.

(From our Regular Correspondent.)

LONDON, May 25, 1907.

The Adulteration of London Milk.

In spite of the extensive precautions of the health authorities it is notorious that the milk sold in London is adulterated on a large scale. In many cases this can be done with impunity, because the standard of cream necessary to allow milk to pass has to be fixed as low as that of poor natural milk. Thus richer milk can be watered down to the composition of poor milk with impunity. The health officer of Battersea in his annual report declares that inhabitants of London pay at least $150,000 for water added to milk. The adulteration of milk is a very profitable business and the fines imposed are totally inadequate to check it. The same offenders are convicted repeatedly. The report states that the best method would be to license the milk vendors, the license to be renewed annually, as in the case of slaughter houses and cow sheds. This step has proved very successful in stopping adulteration in the West Indies.

The United Services Medical Society.

It has been decided to follow the example of the French, who a short time ago founded a society of military medicine. A meeting of the medical officers of the army and navy has been held for the purpose. Inspector General Ellis, director general of the navy, presided. The objects of the society are as follows: 1. The furtherance of sciences which bear on the preservation of the health of forces afloat and ashore, at home and abroad, in war and in peace. 2. The study of diseases and injuries incidental to the life of sailors and soldiers under the varying conditions of climate, locality and circumstances to which they are exposed in the performance of their duties. 3. The study of the organization, methods and apparatus for the amelioration of the condition of the wounded in war. 4. All matters which come within the scope of the technical duties of naval and military medical officers. Meetings will be held monthly in the Royal Army Medical College and the papers read will be published. The society will be managed by a from the army, two from the Indian army, two from the auxiliary forces, and also four ex-officio members, the director general of the army medical service, the director general of the naval medical service, the president of the medical board at the India office and the commandant, Royal Army Medical College.

The Plague in India.

Two facts stand prominently out in connection with the epidemic of plague in India—the appalling magnitude of the mortality and the inability of the government to cope with the disease. In January of this year there were 58,000 deaths; in February, 98,000; in March, 171,000, and in April, 314,000, making a total of 641,000 for the four months. Since the beginning of the present epidemic in 1896 the deaths have reached the enormous total of 5,326,000. The *Lancet* points out the inadequacy of a small service like the Indian Medical Service, which is fully occupied in its ordinary duties, to cope with the epidemic, and urges the government to appoint a special plague service. In this connection the findings of the Indian plague commission, appointed to investigate the disease with regard to the use of Haffkine's prophylactic, are of interest. They found: 1. Inoculation sensibly diminishes the incidence of plague attacks on the inoculated population, but the protection is not absolute. 2. Inoculation diminishes the death rate among the inoculated population. This is due not only to the fact that the rate of the attack is diminished, but also the fact that the fatality of the attack is diminished. 3. Inoculation does not appear to confer any great degree of protection within the first few days. 4. Inoculation confers a protection which certainly lasts for some considerable number of weeks. It is possible that the protection lasts for a number of months. An unfortunate accident occurred in the Punjab in 1902, by which nineteen persons inoculated from the same bottle were attacked with tetanus, to which they succumbed (See THE JOURNAL, March 2, page 811.) This, combined with racial prejudice, has done much to prevent inoculation.

The Epidemic of Cerebrospinal Fever.

The epidemic of cerebrospinal fever is in a stationary condition. In Scotland, during the week ended May 18, 23 deaths occurred in Glasgow, 7 in Leith, 5 in Edinburgh, 2 in Dundee and 2 in Paisley. In Glasgow 125 cases were under treatment. In Edinburgh during the month of April 43 cases were re-

ported, and 36 deaths occurred. In Belfast during the week ended May 18 there were 21 deaths. In London there has been now a total of 420 cases and 295 deaths, and 43 cases remain under treatment.

Insanitary Restaurants in London.

For some years now it has been the practice to make special inspection of restaurants in the city of London. This example has been followed by the city of Westminster. Dr. F. G. Allan, medical officer of health for Westminster, has made a report recently, in which he showed that in 96 restaurants examined by his orders serious sanitary defects were found. In some the kitchens were found to be in a generally dirty condition. Restaurants are far more largely used in London than was formerly the case, so that it is a matter of the utmost consequence that the sanitary arrangements should be as perfect as possible.

Motor Hospital Ambulance for London.

At last London is provided with a motor ambulance. For many years grave dissatisfaction has been expressed at the primitive methods by which those injured or seized with sudden sickness in the streets were conveyed to the hospitals. The usual mode of conveying such persons was by means of a hand ambulance borne by policemen. On May 12, however, an ambulance connected with a series of call boxes was brought into use. The ambulance is an eight-horse power electro-motor vehicle with stretcher accommodation for two injured individuals, and a similar number of attendants, and is equipped with all the necessary appliances. This ambulance is for use at St. Bartholomew's Hospital, and if it works satisfactorily it is intended to provide two others in the east of the city of London.

Red Cross Conference Meeting to be Held in London.

For the first time, the International Red Cross Conference—which meets every five years in one of the capitals of Europe—will be held in London. The meeting will take place June 10 to 15, under the patronage of the king and queen. The conference will be noteworthy from the fact that there will come into operation for the first time the fund established in 1902 by the Dowager Empress Marie Feodorovna of Russia, with the object of allocating the interest, which amounts to about $10,000 every five years, in prizes to the authors of the best inventions for diminishing the sufferings of wounded and sick military persons.

Physicians' Mistakes in Diagnosis.

The Metropolitan Asylums Board (which controls all the hospitals of London devoted to infectious diseases) has just issued its report for 1906. During the year, 30,228 patients were treated in the fever hospitals and 27 patients in the smallpox hospitals. The number of cases of scarlet fever amounted to the enormous total of 21,404, a larger number than in any previous year. The increase was not due so much to increased prevalence of the disease as to the increased percentage of persons attacked who now enter the hospital; in 1890, only 42 per cent. of the persons attacked entered hospital; last year 88 per cent. were admitted. The death rates were as follows: Scarlet fever, 2.9 per cent.; diphtheria, 8.8 per cent.; typhoid fever, 16 per cent.; other diseases 7.6 per cent. No case of smallpox was fatal. The diphtheria mortality still remains low. In 1893, the year before the adoption of antitoxin treatment it was 30.4 per cent. At one of the hospitals a record has been kept of the mortality rates according to the day of the disease on which the antitoxin treatment was commenced. The results are a striking testimony of the value of the treatment and of the importance of early injection. Of 235 cases treated during the years 1897 to 1906 on the first day of the disease not a single one was fatal. Of 1441 cases treated on the second day 4.3 per cent. were fatal; of 1,600 cases treated on the third day 11 per cent. were fatal; of 1,376 cases treated on the fourth day 17.2 per cent. were fatal; and of 1,645 cases treated on the fifth day 18.72 per cent. were fatal. Of interest are the statistics of mistakes in diagnosis made by physicians who sent the patients to hospital. The cases in which the patient was found not to be suffering from the certified disease numbered 2,151. The percentage of error among cases certified as scarlet fever was 5.2; as diphtheria, 18.3; as typhoid fever the enormous one of 33.7.

British Neglect of Chemical Research.

Prof. Meldola, F.R.S., president of the Chemical Society in a remarkable address on "The Position and Prospects of Chemical Research in Great Britain" emphasized the public apathy toward science. "The nation, as a whole," he says, "has not recognized the principle that the productive activity of the scientific worker is one of the prime factors in national development. Attention to this national weakness has from time to time been called by the publicists but public interest in scientific research is still at a low level, lower than in many leading nations. A temporary flicker of excitement is caused when some sensational discovery is announced or when some result of immediate practical (commercial) value is made known. Research as a cult is not understood; the national attitude toward the worker is one of 'payment by result' the very narrowest sense of the term. Our universities are failures as centers of chemical research. The deterrent causes are ancient traditions, defective educational methods, want of sufficient means leading to frittering away of the research faculty by the drudgery of coaching, the poor outlook for chemical research as a career, and the pedantic notion that a subject requiring for its advancement something akin to manual labor is derogatory to high scholarship."

Compensation for Industrial Diseases.

The committee appointed by parliament on compensation for industrial diseases has recommended a remarkable extension of the diseases and injuries entitling the worker to compensation. In a report issued last year the committee recommended six extensions which have been adopted: Anthrax, ankylostomiasis, and lead, mercury, phosphorus and arsenic poisoning. Now no fewer than eighteen extensions are recommended. These may be grouped as follows: 1. Poisoning and its sequelæ. The dock laborers and others who handle, as well as the workmen and others who use arsenic, are included. Poisoning by any of the processes involving the use of nitro or amido derivatives of benzene and of carbon sulphid, their preparations and compounds; any process in which nitrous fumes or nickel carbonyl gas are evolved; any process in the manufacture of African boxwood (poisoning by which was described in a previous letter to THE JOURNAL as a new condition). 2. Skin diseases: Chrome ulceration or its sequelæ arising from any process involving the use of chromic acid or bichromate of ammonium, potassium or sodium and their preparations. Eczematous ulceration of the skin produced by dust or caustic or corrosive liquids, or ulceration of the nose or mouth produced by dust. Epitheliomatous ulceration of the skin, or ulceration of the skin or the surface of the eye due to the handling or use of pitch, tar or tarry compounds. Scrotal epithelioma (chimney-sweeps' cancer). 3. Miners' diseases: Nystagmus, "beat hand," "beat knee," "beat elbow," synovitis and tenosynovitis of the wrist from a long succession of jars due to working a pick in hard coal. 4. Miscellaneous: Glanders acquired during custody of an equine animal suffering from the disease or from handling its carcass. Compressed-air illness and its sequelæ. The liability of chimney-sweeps to cancer in consequence of the irritation of the skin by the soot is shown by the fact that the mortality from cancer among them is twice that of male workers in general. Much of the report is occupied with a discussion of phthisis and pulmonary fibrosis in connection with the group of diseases arising from inhalation of dust—"miners' phthisis," "stonemasons' phthisis," "potters' rot," "grinders' rot," etc. The general conclusion is that while evidence of the prevalence of fibroid phthisis can not be ignored, it is prudent to keep in abeyance the question of scheduling these diseases. The disease known as "bottle-makers' cataract" is regarded as a subject for further inquiry.

Women Drinking and Infantile Mortality.

The question of alcohol and of alcoholism is greatly in the minds of British people at the present time. The fact is slowly but surely penetrating the brains of the "man in the street" that the drink problem is a very serious one in Great Britain and that it must be grappled with at once. One phase of the subject is now being earnestly taken up, that of women carrying infants in arms drinking in public houses. An important conference to discuss the situation was held some weeks ago in London, at which were present several influential members of the medical profession, as well as noted men drawn from all ranks of life. Sir Lauder Brunton, who was one of the speakers, placed the position clearly before the audience. He said in part: "My experience as physician at St. Bartholomew's Hospital, reaching over several hundred thousand cases, has shown me that the ordinary rule which obtains is, 'Mother a bit and sup; baby a bit and sup,' and generally the sup consists of gin and water. It must be quite evident that this process of slow poisoning destroys the child, one would say body and mind were it not that very often the body is destroyed before the mind has time to develop." Measures are

to be taken to prevent by legislation in Great Britain children under 14 from entering public houses.

Manifesto in the Lancet on Alcohol.

The *Lancet* some few weeks ago published a manifesto, to which were appended the signatures of the most distinguished British physicians, stating that, in the opinion of the signers, alcohol in certain circumstances and employed judiciously is a valuable remedy. The publication of this statement raised a storm of dissent, and the correspondence on the matter was both verbose and somewhat tinctured with gall. However, most of those who had so boldly declared in favor of alcohol as a drug, weakened when attacked and endeavored to explain their reasons for signing the obnoxious document. Two stuck to their guns—Professor Halliburton and Sir James Crichton Browne—and asserted that they signed the manifesto in good faith and that its contents expressed their true opinions. And thus the matter rests.

Correspondence

The Viavi "Treatment."

ELMIRA, N. Y., May 27, 1907.

To the Editor:—The enclosed letter was written to a woman who had paid the Viavi representative $175 cash in advance for a "course of Viavi." The female representative had diagnosed a "tumor" (!) and had warned the woman to steer clear of any or all physicians, or take her chance on being ordered to the hospital for an operation (horrors!). After having used the "three-fold Viavi cure" for some eight or ten months and feeling somewhat worse, she visited a physician, who failed to find a tumor, but did find a retrodisplacement without adhesions. The symptoms, which had been severe backache, some headache and irritable bladder, were permanently relieved by replacing the uterus and using large tampons for about one week. While no further treatment was given or advised, the patient to-day (May 27, 1907), is in excellent health and laughs at the suggestion of examination or further treatment. The Viavi representative had the patient examined by the Viavi (female) "doctor," who corroborated the dingnosis of a "tumor" and urged another six months' course ($75 worth) of the "remedies." The Watkins (Schuyler County) Medical Society brought an action against this Viavi representative for illegal practice, which was discontinued without prosecution, I believe.

Viavi is successful financially—I am ready to swear to that.

WILLIAM BRADY, M.D.

[The letter Dr. Brady encloses is too long for publication. It is poorly written and shows that the writer, although able to work the dear women, is not blessed with too much education.—ED.]

Queries and Minor Notes

ANONYMOUS COMMUNICATIONS will not be noticed. Queries for this column must be accompanied by the writer's name and address, but the request of the writer not to publish name or address will be faithfully observed.

CONRADI'S METHOD FOR DIAGNOSIS OF TYPHOID.

WEST POINT, N. Y., May 30, 1907.

To the Editor:—Will you explain Conradi's method for the diagnosis of typhoid and tell me where I can find literature on the subject.

GEORGE T. TAYLOR, M.D.

ANSWER.—Conradi's culture medium, generally known as Drigalski-Conradi's medium, is made by adding nutrose and crystal violet to lactose litmus agar using 3 per cent. of agar instead of 2 per cent. The crystal violet strongly inhibits the growth of many bacteria other than the typhoid bacillus which would also color the medium red. the 3 per cent. agar makes the diffusion of the acid which is formed more difficult. A description of the method of preparing and using this medium can be found in Park's "Pathogenic Bacteria and Protozoa," 2d edition, page 282. It is applicable to the detection of typhoid bacilli in the stools but difficulties arising from the large numbers of colon and other bacilli render the method as applied to the stools of little use. It has been used, however, to differentiate the bacteria obtained by culture from the blood with better success.

Conradi showed in 1901 that bile has the power of keeping the blood fluid and in 1906 (*Deutsche med. Wochschr.*, Jan. 11, 1906) he proposed his method for hastening the growth of the bacilli in the drawn blood so as to make the culture method available for clinical purposes. He sterilizes a mixture of bile with 10 per cent. peptone and 10 per cent. glycerin and puts it into tubes holding from 2 to 3 c.c. The blood is received directly from the ear into this mixture contained in a capillary glass tube, and after thorough mixing the contents of the tube are emptied into the larger tube and this repeated till all the blood which flows from the little wound in the ear is mixed. The proportion of blood to the entire liquid must be kept as low as 1 to 8. The mixture is kept in the incubator at 37 C. (98.6 F.) for from 16 to 32 hours and then plated on the Drigalski-Conradi medium.

The bacilli are recognized by their usual characters. The method has been especially successful in the discovery of the bacilli in the early stages of the disease. Conradi has since improved his method so that a few drops of blood are required and the blood sent to the laboratory for the Widal reaction can be employed also for the culture of the bacilli. This depends on the fact discovered by Müller and Graf that the bacilli are entangled in the clot when the blood coagulates. Conradi has found that the clot from 0.2 c.c. (4 drops) of blood, will give cultures that enable the diagnosis of the disease in 50 per cent. of cases. He removes the clot and places it in a tube containing 5 c.c. of his bile mixture and incubates for from 12 to 16 hours then spreads 0.1 and 1 c.c. on dried plates of litmus-milk-sugar-agar. The further investigation is carried out in the usual way.

FORMULA FOR DEPILATORY.

CINCINNATI, June 5, 1907.

To the Editor:—Please give a prescription for removing the hair before operation that will be less irritating than a mixture of barium sulphid with two parts of flour. B.

ANSWER.—Preparations made by sulphurating lime are recommended as depilatories, but whether their action is milder than that of barium sulphid must be determined by experience, and would depend in any event on the strength of the solution employed. It would seem an easy matter to regulate the severity of the action by the strength of the solution. The following preparations may be tried:

Calx sulphurata, U. S. P.

Liquor calcis sulphurata, N. F.

Martin's Depilatory: "A soft mass, containing calcium hydrosulphid, $Ca2HS$, is prepared from 2 parts of slaked lime and 3 of water by passing hydrogen sulphid into the mixture as long as it is absorbed. The mass has a strong sulphurous odor, and, on standing, separates into two portions, which are to be mixed when used: if properly prepared, an application for eight or ten minutes is sufficient for removing the hair." National Dispensatory.

TO "BREAK" HARD WATER.

OLUSTEE, OKLA., May 15, 1907.

To the Editor:—I practice in a region where the water is loaded with gypsum and its use for lavatory purposes is open to serious objection. My hands are continuously unfit for surgery. On account of the unsightly fissures about the nails, I can not disinfect them. What can be done to this wretched plaster-of-Paris solution to render it "bath worthy"? Please do not say use rain water, for often it does not rain here for months.

S. H. LANDRUM, M.D.

ANSWER.—If the hardness of the water is due to carbonates of lime or magnesia (temporary hardness), the addition of lime (CaH_2O_2) will precipitate the troublesome ingredients. If, however, as you intimate, the hardness is caused by sulphates (permanent hardness), sodium carbonates (Na_2Co_3) may be employed. In some degree the treatment of each individual water is a problem by itself, but it is probable that by a little experimentation with varying quantities of lime and soda, you can largely improve the character of the water.

RECTAL INCONTINENCE FOLLOWING LABOR WITHOUT PERINEAL LACERATION.

MARION, IND., June 3, 1907.

To the Editor:—Please cite literature on rectal incontinence following labor with no perineal laceration. I have two cases in one family—an aunt in whom the condition has existed thirty-five years, and a niece in the sixth week of the puerperium. E. H.

ANSWER.—There is practically no literature on this subject. An article by W. Bodenhamer (*New York Medical Journal*, April 8 and 15, 1905) on "Atony of Rectum and Anal Sphincters: Its Etiology, Pathology, Diagnosis and Treatment," may contain some reference to such cases. Rosenfeld (*Centralblatt f. Gynaekologie*, xxviii, No 1) has recorded a case of isolated rupture of the sphincter ani during labor. Possibly similar ruptures of the sphincters may be the cause of incontinence in the cases referred to by our correspondent.

The Public Service

Army Changes.

Memorandum of changes of stations and duties of medical officers, U. S. Army, week ending June 8, 1907:

Frick, Euclid B., surgeon, ordered to accompany Third Battalion, Engineers, from Camp Columbia, Cuba, to Fort Leavenworth, Kansas; on completion of this duty will return to station in Cuba.

Scott, George H., asst.-surgeon, is detailed as a member of the Army Retiring Board, Denver, Colo., vice First Lieut. S. E. Lambert, asst.-surg., hereby relieved.

Wyeth, M. C., surgeon, will proceed to the Philippine Islands for duty on the first available transport sailing from San Francisco, Cal., after his discharge from treatment at the Army and Navy General Hospital, Hot Springs, Ark.

Waterhouse, S. M., asst. surgeon., Fort Worden, Wash.; Murtagh, J. A., asst.-surgeon, Fort Mason, Cal.; Buck, C. D., asst.-surgeon, General Hospital, Presidio, San Francisco, Cal.; Brechemin, Louis, Jr., asst.-surgeon, Fort Baker, Cal.; Davidson, W. T., asst.-surg., Fort D. A. Russell, Wyo.; Smith, H. M., asst.-surgeon, Fort Apache, Ariz., and Hall, J. F., asst.-surgeon, Fort Flagler, Wash., are relieved from duty at the posts designated after their names and will proceed at the proper time to San Francisco, Cal., and take transport to sail on or about Aug. 5, 1907, for the Philippine Islands, and on arrival at Manila will report in person to the commanding general, Philippines Division, for assignment to duty.

Duncan, L. C., asst.-surgeon, advanced to the rank of captain, May 10, 1907.

Keller, W. L., and Billingslea, C. C., asst.-surgeons, advanced to the rank of captain, June 2, 1907.

Loving, R. C., asst.-surgeon, granted 30 days' leave of absence.

Kieffer, C. F., surgeon, will proceed to Washington Barracks, D. C., and report in person to the commanding officer, General Hospital, at that post for observation and treatment.

Farr, C. W., asst.-surgeon, granted two months' leave of absence, to take effect on the expiration of his present sick leave.

Wolven, F. H., dental surgeon, ordered from Fort Niagara, N. Y., to Fort Porter, N. Y., for duty.

Porter, E. H., contract surgeon, left Fort Clark, Texas, on leave of absence.

Enders, W. J., contract surgeon, order for Fort Snelling, Minn., revoked; will proceed to Fort Warren, Mass., for duty.

Kuhn, C. F., contract surgeon, granted leave of absence for three months.

Anderson, E. A., contract surgeon, relieved from duty in the Philippines Division; will sail September 15 for San Francisco, Cal.

Hutson, T. O., contract surgeon, returned to Fort Mouitrie, S. C., from duty at rifle range, Wacy, Ga.

Jarrett, A. R., contract surgeon, relieved from duty at Target Range, Creedmoor, L. I., and ordered to return to Fort Hamilton, N. Y.

Trotter-Tyler, George, contract surgeon, ordered to Target Range, Creedmore, L. I., for duty.

Snyder, H. M., contract surgeon, ordered from Cheyenne, Wyo., to Fort Douglas, Utah, for duty.

Henning, O. F., contract surgeon, relieved from further temporary duty at Fort Barrancas, Fla., and ordered to return at the expiration of his present leave of absence to Fort Sheridan, Ill., his proper station.

Tignor, E. P., dental surgeon, ordered from Tacoma, Wash., to Fort Leavenworth, Kans., for temporary duty, and thence to Fort Adams, R. I., for station.

Ingalls, R. E., dental surgeon, relieved from duty at Fort Leavenworth, Kans., and ordered to Philippine service.

Wolven, F. H., dental surgeon, when relieved from duty at Fort Adams, R. I., ordered to proceed to Philippine service.

Wing, P. F., dental surgeon, left Fort Meade, S. D., and arrived at Fort D. A. Russell, Wwo., for duty.

Chambers, W. H., dental surgeon, ordered, on arrival at San Francisco, Cal., to West Point, N. Y., for duty.

Hewitt, J. M., contract surgeon, relieved from duty in the Philippines Division, and will sail September 15 for Sanfrancisco, Cal.

Navy Changes.

Changes in the Medical Corps of the Navy, for week ending June 8, 1907.

Smith, H. W., asst.-surgeon, ordered to report to the Surgeon General of the Navy, Navy Department, for special temporary duty.

Campbell, F. E., P. A. surgeon, detached from the *Constellation* and ordered to the *Washington*.

Short, W. H., asst.-surgeon, detached from the Naval Hospital, New York, and ordered to the Naval Hospital, Philadelphia.

Baker, M. C., acting asst.-surgeon, detached from the Naval Hospital, Va., and ordered to the *Franklin*.

Chapman, R. B., asst.-surgeon, detached from the Naval Recruiting Station, Oklahoma City, O. T., June 27, and ordered home.

Hayden, R., asst.-surgeon, detached from the Naval Medical School Hospital, Washington, D. C., and ordered to the Naval Hospital, Annapolis, Md.

Longabaugh, R. I., asst.-surgeon, detached from the Naval Hospital, Annapolis, Md., and ordered to the Naval Hospital, Mare Island, Cal.

Smith, H. W., asst.-surgeon, ordered to duty at the Naval Medical School Hospital, Washington, D. C.

Public Health and Marine-Hospital Service.

List of changes of station and duties of commissioned and noncommissioned officers of the Public Health and Marine-Hospital Service for the seven days ended June 5, 1907.

Wasdin, Eugene, surgeon, granted leave of absence for ten days from June 9, 1907.

Woodward, R. M., surgeon, granted leave of absence for one month and four days, beginning June 27, 1907.

Stimpson, W. G., surgeon, granted leave of absence for 15 days, from June 11, 1907.

Grubbs, S. B., P. A. surgeon, granted four days' extension of leave of absence, May 31, 1907.

Currie, D. H., P. A. surgeon, granted leave of absence for two months, from June 9, 1907.

Vogel, C. W. P. A. surgeon, granted leave of absence for seven days, from April 1, 1907, under paragraph 191, of the Service Regulations.

Ward, W. K., asst.-surgeon, granted leave of absence for one month, from June 5, 1907.

Sweet, E. A., asst.-surgeon, granted leave of absence for fourteen days, to be taken during the month of June, 1907.

Porter, J. Y., sanitary inspector, granted leave of absence for fifteen days, from June 1, 1907.

Adams, F. B., acting asst.-surgeon, granted leave of absence for twenty days, from June 1, 1907.

Fox, W. E., acting asst.-surgeon, granted leave of absence for eleven days, from June 19, 1907.

James, W. F., acting asst.-surgeon, granted leave of absence for fifteen days, beginning Aug. 17, 1907.

Rodman, J. C., acting asst.-surgeon, granted leave of absence for three days, from June 3, 1907, and four days from June 10, 1907.

Safford, M. V., acting asst.-surgeon, directed to proceed to Concord, N. H., for special temporary duty; on completion of which to rejoin his station at Boston.

Turner, L. A., acting asst.-surgeon, granted leave of absence for fourteen days, from June 4, 1907.

Health Reports.

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon-General, Public Health and Marine-Hospital Service, during the week ended June 7, 1907:

SMALLPOX—UNITED STATES.

California: San Francisco, May 18-25, 1 case.
Illinois: Chicago, May 25-June 1, 10 cases; Moline, May 19-26, 1 case; Springfield, May 23-30, 1 case.
Indiana: Indianapolis, May 12-26, 4 cases; LaFayette, May 20-27, 1 case.
Iowa: Davenport, May 17-31, 2 cases.
Kentucky: Louisville, May 23-30, 3 cases.
Louisiana: New Orleans, May 18-25, 4 cases (3 imported); Shreveport, 1 case.
Massachusetts: Lawrence, May 18-25, 1 case.
Michigan: Detroit, May 25-June 1, 10 cases; Fenton, to May 25, 41 cases.
Minnesota: Winona, May 4-11, 2 cases.
Mississippi: Natchez, May 18-25, 1 case.
Missouri: St. Joseph, May 11-25, 32 cases; St. Louis, May 18-25, 1 case.
New York: Buffalo, May 18-25, 4 cases; New York, 4 cases; Niagara Falls, 1 case.
North Carolina: Greensboro, May 18-25, 2 cases.
Ohio: Dayton, May 18-25, 1 case; Toledo, May 4-18, 28 cases.
South Carolina: Camden, May 18-25, 1 case.
Tennessee: Nashville, May 18-25, 1 case.
Virginia: Richmond, May 18-25, 2 cases.
Washington: Spokane, May 18-25, 20 cases; Tacoma, 2 cases.

SMALLPOX—INSULAR.

Philippine Islands: Manila, April 13-20, 1 case, 1 death.

SMALLPOX—FOREIGN.

Austria: Trieste, May 11-18, 2 cases.
Brazil: Para, May 11-18, 2 cases, 4 deaths.
China: Tientsin, April 21-28, 1 case.
Colombia: Barranquilla, May 11-18, 1 death; Cartagena, April 20-May 11, present.
France: Paris, April 27-May 11, 21 cases, 6 deaths.
Germany: General, May 5-11, 12 cases; Manheim, May 11-18, 1 death.
Great Britain: Liverpool, May 11-18, 1 case (from vessel); London, May 4-11, 1 case; Southampton, May 11-18, 1 death.
India: Bombay, April 30-May 7, 1 death; Calcutta, April 20-27, 67 deaths; Madras, April 20-May 3, 3 deaths.
Italy: General, May 7-16, 15 cases; Naples, May 4-18, 11 cases; Turin, April 28-May 12, 3 cases, 1 death.
Java: Batavia, April 20-27, 5 cases.
Manchuria: Dalney, April 20-27, 1 case.
Mexico: Aguas Calientes, April 20-27, 23 deaths, May 11-25, 33 deaths; Mexico, April 27-May 4, 5 deaths; Monterey, May 12-19, 1 death; Nuevo Laredo, May 11-18, 1 case, 1 death; Sonora, April 6-20, 3 cases.
Portugal: Lisbon, May 11-18, 7 cases.
Russia: Odessa, April 28-May 11, 11 cases, 1 death; Riga, May 11-18, 11 cases; St. Petersburg, April 28-May 4, 1 case.
Spain: Barcelona, May 13-20, 3 deaths; Carthagena, April 28-May 4, 1 death; Valencia, May 12-19, 16 cases, 3 deaths.
Turkey in Asia: Bagdad, April 13-27, present; Bassorah, April 29-May 4, present; Constantinople, April 21-28, 3 deaths, May 4-12, 1 death.
Venezuela: La Guira, March 31-May 25, present; Maracaibo, May 4-12, 1 case, 1 death.

YELLOW FEVER.

Brazil: Para, May 11-18, 2 cases, 1 death.
Cuba: Habana, May 25, 1 case (from San Nicolas).
Guatemala: Gualan, May 21, 3 cases, 1 death.
Venezuela: La Guira, May 4-11, 1 case, 1 death.

CHOLERA.

Ceylon: Colombo, April 6-13, 1 case, 1 death.
India: Calcutta, April 20-27, 33 deaths; Rangoon, 16 deaths.

PLAGUE.

Egypt: Alexandria, May 9-16, 21 cases, 34 deaths; Beni Souef Province, 19 cases, 9 deaths; Girgeh Province, 30 cases, 29 deaths; Keneh Province, 12 cases, 14 deaths; Minieh Province, 22 cases, 30 deaths; Samallut Province, 15 cases, 8 deaths.
Formosa: April 20-May 4, 236 cases, 210 deaths.
India: General, April 20-27, 87,394 cases, 76,711 deaths; Bombay, April 30-May 7, 230 deaths; Calcutta, April 20-27, 423 deaths; Rangoon, 71 deaths.
Straits Settlements: Singapore, April 13-20, 1 death.

OFFICIAL MINUTES—HOUSE OF DELEGATES.

PROCEEDINGS OF THE FIFTY-EIGHTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION, HELD AT ATLANTIC CITY, JUNE 3-7, 1907.

(*Continued from page 1969*)

The minutes of the First Meeting, held on Monday morning, were published in THE JOURNAL, June 8, page 1957.

Second Meeting—Monday Afternoon, June 3

The House of Delegates was called to order at 2 p. m. by President Mayo.

Forty-four delegates responded to roll call.

The minutes of the previous meeting were approved.

Report of the Committee on Organization.

REFERRED TO COMMITTEE ON REPORTS OF OFFICERS. (See page 2056.)

Dr. J. N. McCormack, Kentucky, Chairman, read this report:

Since my last report at the Boston session, I have made more or less complete itineraries in Michigan, Ohio, Alabama, New Jersey, Arkansas, Iowa and Nebraska, and have addressed one or more meetings in Florida, Pennsylvania, Maryland, Virginia, West Virginia and Kentucky. I have also spoken, on special invitation, before joint sessions of the legislatures in Alabama, Tennessee and Arkansas, and have received invitations from the governors of several states to address their respective legislatures when next convened.

DEVELOPMENT OF COUNTY SOCIETIES.

Taking up matters in the order of their importance, I desire to urge on the House of Delegates the paramount duty of more fostering care in the work of county societies, the foundation and hope of our organization. In my last report I referred briefly to the serious conditions which have confronted councilors and other workers since the exhaustion of the first outburst of enthusiasm following the reorganization movement in maintaining the interest in these societies. Outside of the large centers of population it has been found practically impossible to do this under the old order of programs, with text-books, papers and routine discussions at monthly, bimonthly or quarterly meetings. The plan for systematic postgraduate instruction, originating in the minds of thoughtful workers of widely separated sections, acting quite independently of each other, to meet this difficulty, found such favor that it spread rapidly and is now in more or less satisfactory operation in many counties in several states.

POSTGRADUATE COURSE.

Believing that there are almost unlimited possibilities in this scheme as a means of inducing both young and old members to continue or to revive their interest in scientific medicine, and that there are few physicians anywhere who would not be benefited by such a review course, the committee has induced Dr. J. H. Blackburn, Bowling Green, Ky., who has been a leading spirit in conducting a course in his own county society, to elaborate a tentative plan covering a four years' course of study, adapted to the needs of the average county society. This has been printed, with an explanatory letter from Dr. Blackburn, for submission to you first, and then to send to active, carefully selected workers in every section of the country, with the hope of eliciting helpful criticisms and suggestions. If the plan meets your approval, after profiting by such criticism as may be obtained, it is expected that the outline for the entire course can be revised, printed in pamphlet form, and put in the hands of the county societies at an early day, so that the teaching work may be assigned to members, and that the weekly course, elaborated somewhat after the university extension idea, may begin in THE JOURNAL of the Association and the monthly journals by the first week in September.

While it is hoped, in the course of time, to make this so attractive that a majority of county societies and physicians all over the country will be engaged in the same line of study, it should be borne in mind that the course is purely suggestive. Stimulated by what we propose, it is hoped and expected that many societies, especially those in the educational centers, will suggest something far better, and that out of all of them may be evolved something so nearly ideal that by the second year, or at least by the second cycle, it can be utilized in any community where as many as three or four members can be gotten together each week, or even as a course of home study by those less fortunately located.

After the course is well under way, if it proves as practical and successful as is anticipated, it may come about that county societies will be asked to appoint committees and conduct examinations on blank forms furnished, probably at home under an implied pledge not to seek text-books or other aids, something after the Chautauqua idea, and that a certificate will be provided, all free of expense, to those who take the course to the satisfaction of their county society. The necessity of doing something in this direction, and the magnitude of the problem, will be appreciated when it is known that a large majority of the 122,000 licensed physicians who are treating sick people every day do not attend medical meetings, and that a large per cent. of this element do not read recent periodical or standard literature. I am convinced that this is entirely practical, that excellent teaching can be developed in a majority of the county societies with little or no outside aid except from the councilors, printed matter, and weekly elaboration in the journals, and my idea is for the Association to take the work up in a comprehensive way and to prosecute it year after year, until, with cooperation of the Council on Education and state boards, a competent, up-to-date physician has been placed within the reach of every family in the United States. It will probably require about six hundred dollars ($600) annually to meet the expenses incident to the preparation of this course, and I suggest the appropriation of this amount or so much thereof as may be necessary, to be expended under the direction of the Secretary.

Meeting and discussing matters of common concern with the rank and file of the profession of widely separated sections in a frank heart-to-heart way from month to month, as well as through the extensive correspondence of my office with county society and other officials in every part of the country, I have been able to study and weigh professional conditions and sentiment on nearly every matter of general interest in a very broad way. As I have talked to lay audiences in the evening, after meeting the profession in the afternoon at almost every appointment, I have also had an opportunity to gauge public opinion in regard to our work in a comparative way from year to year.

As a result of this large experience and study, I am gratified to report that in its essential features our system of organization has constantly grown in the confidence of the profession by trial, and is no longer considered an experiment anywhere. I have often met the honest, intelligent, healthy criticism and inquiry as to methods, details and individuals so much to be desired, and have courted and encouraged this

spirit as not only legitimate, but most hopeful and helpful. The constant growth in harmony, in confidence in itself and in power over public and legislative opinion, even more noticeable than the gain in membership, which goes steadily on from year to year in nearly every state, are so evident as finally to convince most of those who were long naturally doubtful as to the wisdom of the change of methods.

In fact, I have been constantly both surprised and gratified to find how few, except those commercially interested, have been misled by the active and adroit crusade of the proprietary medicine people and their allies. The journals directly controlled by them have been made to serve their masters with only such regard for truth and decency as would best carry out the purposes for which they exist. With that element of the so-called independent, but really most dependent, medical press, indirectly controlled by the same interests, probably some time without being fully conscious of it, it is more difficult to deal, although it is often hard to distinguish between them. Many of these editors are good men who want to be loyal to the best interests and traditions of the profession, but, living in a commercial age, and accustomed to receiving revenues from the same advertisers until it had become second nature, and seemed almost essential to their existence, they were blinded to the importance of the drug reform which has swept over the profession and country like a tornado. Iterating, reiterating and repeating by quotations from each other the pure fabrications, or worse insinuations, and innuendoes, evidently all having a common origin, these journals, paid for by somebody, have flooded the desks of doctors all over the country like the leaves of autumn. They might have created distrust even in our membership had not their vehemence been too loud and insistent to be disinterested, and because nearly all of their stories bore unmistakable ear-marks of their common mercenary paternity. I desire to emphasize that what is said here does not apply to those journals, under whatsoever management, which are making faithful efforts to foster scientific medicine and to free their advertising columns from objectionable matters. On the contrary, these are entitled to and should receive not only the cordial moral, but the financial support of the profession.

While these misrepresentations have done so little harm with the membership, I am convinced that they have kept many from joining the societies and have crippled our usefulness in many other ways. As one evidence of this, they have arrayed the retail druggists against us almost solidly in most states. At every capital visited I have found a strong force of drug men working under the direction of expert lobbyists representing the National Association of Retail Druggists, backed by the proprietary interests, against the legislation proposed by the profession in the interest of pure food and drugs, with all of their expenses borne by that body. In every instance an attempt was being systematically and often successfully made to confuse the minds of legislators by the introduction of decoy bills prepared by their central bureau, but cunningly altered as to wording in the various states to hide their common origin. It was found in every instance that legislators were also literally inundated by letters and telegrams from their drug and newspaper constituents in the interest of these now fully exposed and recognized frauds. As a real friend of the pharmacists, one who has always been wedded to the prescription method of dispensing, the discovery of this almost universal ascendency of the quack interests over this trade was a painful one. It evidently means that we have come to the parting of the ways with the druggists, and must arrange to dispense for ourselves, as is being done in other countries, unless prompt steps are taken in a comprehensive way to restore proper relations with them.

For these and other reasons, the time has come for this House to meet frankly and once for all to set at rest the issues raised by these people or by anybody else who has criticisms to offer. Everything so far proposed for improving our methods was threshed out and rejected in framing our organization, but there is nothing about the plan, its purposes or its personnel which is not subject to fair criticisms and discussion. Most of your officers serve gratuitiously, and some of them have given the best years of their life in this way. This is also true of the executive boards, which are arousing so much opposition because they are doing fearless and admirable work. You have but two salaried officials. I am one of these. Paid or unpaid, we are all your servants. Speaking for myself, although I know that I may speak for all, I ask you to investigate, criticise and condemn, if you will, but let all who have complaints or doubts speak out in open meeting as candidly as I do in giving the results of my work, in which, although I hold my position by your partiality, I have always felt the utmost freedom. Half of the members of this House have served in it for at least one year, some like myself for several years, and the other half are fresh from their constituencies, to whom and our consciences all of us are alone responsible. All have equal interests, rights and powers, and if any are dominated by improper motives or influences it is a reflection on either their integrity or their intelligence. I am satisfied that no such influence has ever been exerted or attempted, but it is your duty to satisfy yourselves if there be any question in your minds. Let us take up all of our work in this kind, frank, dispassionate way, remove the causes of complaint, if any exist, remaining here for ten days or two weeks, if necessary, to do it all thoroughly, and return home with such foundations laid for so much better work that it will make our profession the powerful factor in its own uplift and in public affairs which is demanded for the welfare of those we serve, bearing in mind that we are the real official Medical Congress of these United States.

REPORT ON BRANCH ASSOCIATIONS.

On account of repeated solicitations from various interstate societies for authority to organize branch associations under the permissive provision of the by-laws of this Association, your committee submits its second report on this subject. We renew our recommendation that permission be given for the organization of seven branches, at the discretion of state associations composing them, so arranged as to cover the entire country. Provisionally, it is suggested that the branches be numbered and named, and that they shall contain or have assigned to them states and territories, as follows:

1. North Atlantic Branch: New York, New Jersey, Connecticut, Rhode Island, Massachusetts, Maine, Vermont and New Hampshire.

2. Atlantic Coast Branch: Pennsylvania, Maryland, Delaware, District of Columbia, Virginia, North Carolina, South Carolina and Porto Rico.

3. Southern and Gulf Branch: Georgia, Florida, Alabama, Mississippi, Louisiana, Arkansas and Tennessee.

4. Mississippi Valley and Lake Branch: Ohio, Indiana, Illinois, Missouri, Kentucky, Michigan and West Virginia.

5. Northwestern Branch: Wisconsin, Minnesota, Nebraska, Iowa, North Dakota, South Dakota, Montana and Wyoming.

6. Southwestern Branch: Texas, Oklahoma, Indian Territory, Kansas, Colorado, New Mexico and Arizona.

7. Pacific Coast and Mountain Branch: California, Oregon, Washington, Idaho, Nevada, Utah, Alaska, Hawaii and the Philippine Islands.

A form of constitution and by-laws is also submitted providing that membership in such branch associations shall be entirely voluntary, as in this association, but shall be limited to those who are in good standing in their respective county and state associations. Such officers shall be elected as may be necessary and, in every way, each branch will have the fullest possible autonomy consistent with its relations to the state organization composing it.

JOINT MEETINGS WITH STATE ASSOCIATIONS.

As branch associations are organized, it is recommended that, in so far as possible, they arrange to hold their meetings in the fall, and at the same time and place as the meeting of the state association of the state in which the meeting is held. For instance, if the meeting of the Mississippi Valley and Lake Branch is to be held with the Kentucky State Medical Association in 1908, it is suggested that the scientific programs of the two bodies be merged for that year, the Kentucky house of delegates meeting separately, of

course. The same arrangement would apply to other states from year to year until the meetings had gone around. The bulk of the attendance under such a plan would be from the membership of the state in which the meeting was held, as would be the case in any event, but there would always be a sufficient attendance of the leaders from other states to add greatly to the interest of the state meeting for that year, and in time this advantage would be extended to each state embraced in the branch.

In making the assignment of states, existing interstate organizations, natural affiliations and facilities for travel, were considered so far as known and possible, but it should be understood that what we suggest is tentative and somewhat as a basis for discussion. Members of the House from the various states and sections, better advised, may be able to suggest changes and shifting of states which will make the plan more acceptable.

STATE MEETING TO BE HELD IN THE FALL.

For the reason here set forth, and for others still more important, it is again urged that all the state associations which have not yet done so, seriously consider the advantages to be gained by holding their meetings in the fall, as nearly as may be, midway between the meetings of this association. A number of state associations have already acted favorably on this suggestion and the advantages of the arrangement are evident. With the state and national meetings coming within a few weeks of each other, as is often unavoidable when both are held in the spring, many of our best members are forced to miss both of them. In addition, and probably more important, half of the delegates from such states begin active service at once without the time for such inquiry and study as would make them most useful to their constituents and to the cause of organization.

The committee realizes that the matters embraced in this report are important and far-reaching, and that it may be several years before some sections will be ready to organize branches. On the other hand, other sections with long established strong societies are ready and anxious to come into such relations with the system as will make them valuable factors in the scheme of organization, and some of these have had formal applications for such relations pending for several years. Instead of increasing it would really tend to diminish the number of societies, as there are already two or more organizations in almost every section indicated for a branch, some of them semi-national in scope or claims, and all of them overlapping each other in such a way as to produce inextricable confusion. We only propose a plan or framework for such an orderly growth and development as will bring an occasional stimulant to the scientific work of each state society without a possible interference with its official proceedings, furnish an opportunity for the recognition of the large and growing class of worthy men, especially the younger men, who, in consequence of our rapid growth, find it more and more difficult every year to get on the program of the section, and, at the same time, to make the branches feeders and culture beds for developing higher work in these sections.

If the recommendations are approved nothing hasty or ill-considered can result, as the whole question as to each branch or participation therein, is conservatively left to the state associations composing them, and membership is made voluntary, and is limited to those who are members of their respective county and state societies.

Respectfully submitted. J. N. McCORMACK.
GEORGE H. SIMMONS.

This report was referred to the Reference Committee on Reports of Officers.

Report of the Committee on Ophthalmia Neonatorum.

REPORT ACCEPTED.

Dr. F. Park Lewis, Chairman, reported as follows:

To the House of Delegates, American Medical Association:

Gentlemen:—Your committee beg leave to report that they have taken counsel with their colleagues in ophthalmology, in obstetrics, in bacteriology, in sanitation and in public health. Through their courtesy they have received a large number of reprints, pamphlets, personal communications and other expressions of opinion on the subject of ophthalmia neonatorum which have been of inestimable value in enabling them to formulate their conclusions, and for which they desire to express their sincere appreciation. The problem which has been submitted to them is almost unique, as it involves a preventable disease which is not prevented and a curable disease which continues to be the most prevalent local cause of blindness. In the year 1906 it contributed 7 per cent. to the blindness that developed in the state of New York, and its importance was recognized in the United States Census for the Blind and Deaf, taken in 1900, in which the following words were used:

> Of the totally blind in the United States 3,935 were blind at birth, or became so under one year of age, while for the partially blind the corresponding figures are 3,434.
>
> These 7,369 persons whose vision was totally lost or severely impaired before the completion of the first year of life represent 11.04 per cent. of the total number of blind.
>
> Excluding congenital defects, and accidents and operations, there are 2,556 who lost sight after birth but under one year of age, and in 644, or 25.02 per cent. of these cases the cause of blindness was probably ophthalmia neonatorum, since other diseases of the eyes causing blindness are extremely rare.
>
> The importance of these figures lies in the fact, the report continues, that this disease, which is very malignant and which attacks the infant at birth or immediately after, and almost always results in total destruction of the sight—usually of both eyes—or in very severely impaired vision, is now considered preventable, and if proper measures had been instituted at the time of birth few or none of these cases would have occurred.
>
> It is not pertinent in this connection to discuss the means of prevention, which are well known, but it can at least be pointed out that the so-called "sore eyes" of babies is a highly dangerous affection and that its treatment should be prompt and energetic and carried out by a properly competent person.

The purpose of the committee in directing attention to this official statement by the central government is to more exactly define the character of the problem presented for solution.

The purpose for which your committee was appointed was not to determine the relative efficiency of different methods of procedure for the purpose of eradicating this plague; those with which we are familiar are abundantly adequate. The problem to be solved is not *what* to do, but how to get that done which is known to be effective. It is not a thing to be determined—it is a thing to be done. The protection of the citizen from the assaults of ignorance, indifference or neglect when they threaten his well being and even his economic efficiency, is a duty which the state can not evade and which he has a right to exact.

It is as essentially the duty of the state through its department of health to protect him from an infection which destroys his sight as it is to save him from needless exposure to smallpox, diphtheria or yellow fever, and the difficulties to be encountered are no greater. It is essential that there shall be recognized responsibility on the part of all persons, whether they shall be physicians or laymen, who shall undertake to engage in the important work of caring for the parturient woman and her newborn child.

"Last year the demand for a midwife's attendance was voiced by 43,834 mothers in Greater New York—42 per cent. of the total number of births reported." Except in some of the western counties of that state the midwives have no legal status, are required to have no standard of proficiency and no adequate supervision is exercised. The same lack of responsibility to central authority is general throughout the country. The difficulty, almost impossibility, of enforcing the admirable ophthalmia law where it exists will be evident.

Your committee believe with Cohn and with Hess that ophthalmia neonatorum as a cause of blindness must and shall be wiped out of all civilized countries, but so stupendous is the task that this can be accomplished only by wise counsel, by concerted effort and by cooperative action.

Your committee believes that effective measures against this disease require that there should be a popular understanding of its dangers and prophylaxis, and that there should be a general movement inaugurated through the health boards of the country for its control, but so important is it that these measures should be rightly formulated that your committee is unwilling, without further advice, to recommend a detailed plan of procedure. That which is determined on should come from the united wisdom of those who look on the subject from many sides. A plan of procedure having been determined on, a concerted effort to carry it into effect should be made throughout the entire country. Should this be done there is no reason to doubt that this prolific cause of blindness can be controlled.

The importance and timeliness of the subject have been recognized by the appointment of committees on ophthalmia neonatorum by the Academy of Ophthalmology and Oto-Laryngology and the American Ophthalmological Society.

Your committee would, therefore, recommend that its work be continued and that it be permitted to formulate a detailed plan of procedure with the advice and consent of the chairmen of the sections on Ophthalmology, Obstetrics, and Hygiene and Sanitary Science, and as the responsibility for effective and uniform action must rest on the officials of the state boards of health for ultimate solution, it is further recommended that the Conference of State and Provincial Boards of Health and the American Public Health Association be invited to appoint committees to cooperate with your committee and those appointed by the Academy of Ophthalmology and Oto-Laryngology and the American Ophthalmological Society, in making effective such a plan as may be determined on and that the health officer of each state or federal territory and the president of each state medical society be also invited to cooperate with your committee in carrying these procedures into effect throughout the United States.

Respectfully yours,

F. PARK LEWIS, Chairman.
J. CLIFTON EDGAR,
F. F. WESBROOK.

Dr. Frank Billings, Illinois, moved that the report of the committee be accepted, with its recommendations, and that these recommendations be carried out.

This motion was seconded by several and carried.

Report of the Committee on Section on Tropical Medicine.

COMMITTEE CONTINUED.

In the absence of Dr. Ludvig Hektoen, chairman of this committee, the Secretary read the report as follows:

As chairman of the committee appointed in accord with Dr. Herzog's resolution to consider the advisability of creating a section on "Tropical Medicine," I beg leave to state that the committee is not yet in a position to make any report.

L. HEKTOEN.

As no objection was raised, this committee was continued.

Report of the Committee on the Establishment of a Board of Public Instruction.

REFERRED TO REFERENCE COMMITTEE ON HYGIENE AND PUBLIC HEALTH. (See page 2051.)

DR. JOHN G. CLARK, chairman, presented the report of this committee.

To the House of Delegates of the American Medical Association:

In recent years the world at large has been brought more and more, through popular channels of publication, into touch with advancements in all of the sciences. The layman, therefore, who keeps abreast of current literature has a very good conception of what is occurring in the various scientific branches of knowledge, with the exception of medicine.

As at present constituted, largely through ethical limitations, it is difficult, so we are informed by several leading editors, for them to secure accurate information from accredited sources, on many medical subjects which vitally interest the general public. It is the opinion of your committee that a most valuable means is being lost of disseminating knowledge on topics which are constantly being brought into the foreground of our national societies, and which would be of the greatest value to the lay world if presented in a popular form. A systematic use in an ethical way of the public press will materially assist the physician not only in carrying into effect general sanitary regulations, but as well the actual treatment of infectious cases during outbreaks of epidemics. Also a very great stride will be made toward effecting wise medical legislation, if through the public press the lay public is made acquainted with the many advances in medicine, and especially if the way is pointed in which the citizen may assist by individual effort and through legal regulations of evils, which the doctor is frequently combating almost unaided. In the past, quite wisely, there have been ethical restrictions which have prevented the names of physicians from appearing in public print in connection with medical matters. Now, however, that so much of the progress in the healing art has directly to do with sanitation, hygiene and preventive medicine, it seems judicious that we should inaugurate some method of employing, without ethical offense, this invaluable means of disseminating popular knowledge pertaining to public and individual health.

Briefly summarized, the purpose of a specially constituted Board of Public Education should be: To supply the community at large with established facts regarding matters of general moment and public health. To supply these facts ethically, in good taste, and without the element of individual advancement. To harmonize and give the added value of combined effort to the several interests which are now working independently for the common good along medical lines. To direct this work under the auspices of the American Medical Association, thus giving unity of purpose among the workers and public expression to the aim and aspirations of this national Association.

To ascertain what the sentiment might be on this important question outside of the medical profession, your committee has interviewed some of the leading educators and editors of the United States, and without exception they have all enthusiastically endorsed the general plan as proposed by the committee, which made its report before the House of Delegates at the Boston meeting. Among those who have given us valuable assistance are President Eliot, President Gilman, President Stone of the Associated Press, ex-Postmaster-General Charles Emory Smith, now editor of the Philadelphia *Press*, and Dr. Talcott Williams, also editor of the Philadelphia *Press*.

As a very comprehensive commentary on this scheme of public education, the following letter from the distinguished publicist and editor, Mr. Charles Emory Smith, must have very important bearing in your deliberations as to the value of the plan which your committee proposes. He says:

The conception of a system of popular education on questions of health and hygiene, as you have outlined it to me, under the sanction and through the medium of the American Medical Association, has impressed me very greatly. Rightly worked out I think it has large possibilities of public benefit. If made practical the newspapers would, doubtless, gladly cooperate, and the combination of reasonable medical authority and wide publicity should achieve large and valuable results.

The thought, as I understand it, is to provide timely articles on current subjects relating to the physical well-being of the community and to the right instruction of those who are responsible for the care of households. It is expected that the real interest of the articles will insure their publication, while the authoritative character given to them by the actual direction of the highest medical sources will guarantee their educative value. As the articles are intended for popular reading and guidance they should be of a popular character. This is indispensable to their success. While scientific and exact they should be easily grasped by the general intelligence.

The actual execution of such a scheme involves various practical questions. It is not invidious to say that some physicians have the faculty of writing in popular form and some have not. In projecting the plan it would probably be expedient to consider whether the articles should be prepared by different professional men of eminence specially qualified to treat the particular subjects assigned to them, or whether it would be better to employ a few men who have recognized training for writing popular matter and who could utilize the data furnished to them.

The systematic development and sequence of subjects would require that they should be prepared on a well-conceived and comprehensive plan. This could only be framed by the central committee created by your body. It would have to assume the direction and control and be responsible for the range and quality of the articles. The life and efficiency of the movement would chiefly depend on it.

It need not follow that the succession of articles should everywhere be the same. If in a particular section there is a prevalent epidemic or a special danger, a special series meeting the immediate requirements of that locality should be used there. The system should permit elasticity and variation.

The machinery required must provide for the preparation and dissemination of the articles. The former is the vital need which will require most consideration. The latter can be provided with comparative ease through agencies which are readily available. The essence of the plan depends on the willingness of the profession to enter on it as a method of popular instruction and on such an intrinsic interest in the articles themselves as will secure their continued publication.

As a result of our study of this question we have arrived at the conclusion that this work should take four general directions: First, the publication of suitable articles through the public press; second, keeping on file in a central bureau suitable articles in pamphlet form for general distribution to the public; third, the organization, when it is possible, of public courses of lectures in cities which have medical schools, and in other localities under the supervision of county medical societies; fourth, the dissemination by circular letters of matters of general moment to the medical profession.

Publication Through the Press.—In a personal interview with Mr. Stone, the president of the Associated Press, especially valuable suggestions were given not only concerning the methods of publication, but also as to the general question of the organization of this board. In order to make the articles available for publication through the Associated Press, he suggested that they should come direct from a Board of Public Education rather than from an authorized individual. In other words, he assumed that much greater effect will be made on the lay readers of these articles if they emanate directly from a Board of Public Education than if they are signed articles of physicians. On this point there has been some divergence of opinion, for several prominent editors have taken the view that a paper signed by the author and sanctioned by the Board of Publication of the American Medical Association would carry greater weight than if it appeared as an unsigned publication from the Board of Public Education. Relative to this matter President Eliot takes the following position:

I feel some doubt about the expediency of endorsing each article as "approved by the American Medical Association." Most learned societies do not endorse articles written by their members, indeed they expressly declare that each individual writer is alone responsible for his own communication. Would it not be better to let each author sign his article, and state merely that the article is printed by authority of the committee of the American Medical Association on public instruction? I see no good reason why the authors of the articles should shrink from that form of advertising, if advertising it be.

On this point your committee holds that no matter of a general controversial character should be published, for such questions have no place in the lay press. Every article should deal with questions on which conclusions are sufficiently settled to merit a positive statement as to their facts, and only such articles should command the approval of the Board of Public Education. It is only after debatable questions have been threshed out on the floors of our societies and published in professional journals with reasonably definite conclusions, that they may safely appear in public periodicals.

While your committee has held, and, indeed, are strongly inclined to still maintain that each article shall be unsigned by the individual writer, appearing merely as authorized publications of the Board of Public Education, we have nevertheless been influenced by the many eminent educators and journalists who insist that the author's name shall appear, and that the article shall be authorized by the Board of Public Education. While we have let our report take this form, we hope that the House of Delegates will consider this question separately and decide what attitude shall be taken on this point.

The actual writers of the several articles must be selected carefully in order that the most authoritative information may be given to the public.

The scope and character of the articles to be published is to be determined by the Board of Public Education. One essential feature of these articles is that there shall be the least possible reference, direct or implied, to any person or institution, in order that there may be no imputation, either direct or indirect, that the function of the board is being diverted to the promotion of individual interests. Each article must actually be read by at least two-thirds of the board. Each section of the American Medical Association shall from time to time offer themes which should be brought before the general public, and shall authorize an individual or set of individuals to prepare papers for submission to the general board, which shall have final authority as to the propriety and method of publication.

Concerning the various avenues of publication, our advisors have upheld in general the proposition of your committee. In periods of either local or general epidemics, the Associated Press may be employed as a quick means of instruction to the public as to the proper care and regulations to be observed. Thus, as suggested by one of our advisors, as an example of how valuable this Associated Press news might be; when the country is under the stress of an excessive heat wave, daily warnings by the Bureau of Public Education as to personal hygiene and other measures for the prevention of sunstroke might be given in conjunction with the weather report. For conditions of less emergency, series of articles on innumerable topics might appear in the "patent insides" matter, which is sent to all parts of the United States by the American Press Association. Also carefully prepared articles could be published from time to time in popular magazines, such as the *World's Work*, the *Ladies' Home Journal*, the *Outlook*, the *Scientific American*, etc. In this way much that is of the greatest value could be brought to the attention of the reading public, which would then understand more fully than they do now that the chief aim of the medical profession is to prevent rather than to cure disease.

Bureau for the Preservation of Articles and Their Dissemination in Pamphlet Form.—Any circulating printed medium for the dissemination of news is at best ephemeral, and while the articles above mentioned may be of value for purposes of general instruction and molding public opinion, they will be passed over as is the usual news item, and when the information which they may have conveyed is desired, the daily paper or other weekly or monthly periodical will probably have been consigned to the waste basket. To make these articles quickly available at any time they may be needed, your committee suggests that there be established at the headquarters of the American Medical Association a central bureau, where pamphlets shall be kept in permanent stock, so that they may be drawn on at any time by physicians or laymen. The editor of THE JOURNAL of the American Medical Association suggests that a nominal price, not more than to cover the cost of publication, shall be charged, thus freeing the Board of Public Education from the heavy expense of absolutely free publication and distribution. On such subjects as typhoid fever, scarlet fever and other contagious diseases, as well as many other pathologic conditions, small volumes consisting of chapters on all phases of the disease, available for public use, may be kept on sale and held subject to the order of individuals or booksellers. In this way the busy practitioner, in time of epidemics, who can not possibly give personal directions to each of his patients and much less to the community at large, may have available for immediate general distribution the very best and most concise information, intelligible to the layman, for use in combating these infections.

At most your committee can but make suggestions in this report as to the general scope of this work. Its complete development must devolve on the Board of Public Education.

Public Lectures.—Another effective method of instruction shall be by lectures in public and private schools, in colleges and other institutions of learning. Popular lectures on certain topics may well be conducted under the auspices of local county medical societies, before literary clubs, college settlements, etc.

President Eliot comments as follows on the value of popular lectures:

I believe that articles if well written and adequately illustrated would be very useful, if their publication could be procured in weeklies and other periodicals of large circulation; but it seems to me that wherever there is a medical school another method should be used, viz., the method of popular lectures on preventive medicine and on those diseases the origin and treatment of which can be explained to a popular audience by means of lantern illustrations. The Harvard Medical Faculty has just started a somewhat long course of lectures of this sort given Saturday evenings at eight and Sunday afternoons at four. The attendance at the opening lectures promises a good result.

Circular Letters to Physicians.—The discussion of many subjects should, of course, be restricted to physicians, but in order

to direct uniform attention to them, the Board of Education may consider that they merit special articles or circular letters, under separate cover to the entire medical profession. Thus much valuable work done by the various societies on venereal questions and on cancer of the uterus, etc., would necessarily, because of its private nature, be confined largely to the medical profession. To prevent professional lethargy, however, a special appeal by circular letters will many times be of great value in bringing physicians to the realization of the necessity for concerted work on many of these vital questions.

Organization.—To further the aims, as outlined in the foregoing report, your committee recommends that this Board of Public Education shall be composed of seven representatives, to be appointed by the President of the American Medical Association. Each member shall be appointed for four years. The tenure of office shall be so arranged that not more than two new members shall be appointed annually, thus preserving the individuality of the general constitution of the board and insuring a uniform continuity of purpose. As this Board of Public Education will presumably be composed of physicians more or less busily engaged in their professional or educational duties, it will be necessary for the successful inauguration of this scheme to have a paid secretary, whose duties shall be to attend to the editorial and executive part of this work. On this point all of our advisors are in full accord. Both President Eliot and President Gilman believe that this agent should be medically educated, but endowed with an especial adaptability for the presentation of editorial compositions in an attractive and popular form. Referring especially to this necessity, President Eliot in his comprehensive criticism makes the following remarks on this point:

> I think the committee would need a paid agent who should deal with the authors of the articles, suggest subjects, and maintain the continuity of the work. This paid agent ought to be medically educated, but it would be desirable that he should have had some journalistic or editorial experience. Your committee, therefore, have to propose to the Association a considerable appropriation to cover the salary of a competent man, and the incidental expenses.

Cost of Maintenance.—While it is quite evident from even a casual review of this proposed plan that the expense incident to the work will be considerable, your committee believes that an appropriation of $3,500 a year may be sufficient, at least to inaugurate the scheme and demonstrate its urgent need and great usefulness. Further, it is the hope of your committee that a work, which may be of such far-reaching value, may command the interest of some philanthropist, who may endow a board of this character with sufficient funds to give the widest breadth to its growth.

If a plan of this general character is inaugurated, your committee believes that the natural evolution of the function of this board may be very great, and would ultimately be of profound educational value in the collection and dissemination of scientific, sociologic and statistical facts for the use of the medical profession and for the instruction of the general public, thus rendering inestimable value to mankind. Indeed, as the results of this work are recognized by the public, we believe it is possible that it may logically lead to the establishment of a national executive department encompassing all of these aims. Before our government can be induced to assume this responsibility it must be convinced of its need by actual demonstration.

Respectfully submitted,

F. F. SIMPSON,
J. W. BELL,
STUART MCGUIRE,
W. D. HAGGARD,
WILLARD BARTLETT,
HENRY SEWALL,
JOHN G. CLARK, Chairman.

At the conclusion of the report, Dr. Philip Mills Jones, California, moved that the report be referred to the Reference Committee on Hygiene and Public Health, with the exception of that part of it which pertains to the appropriation of money, and that it be referred to the Board of Trustees. Seconded.

Dr. Denslow Lewis, Section on Hygiene and Sanitary Science, asked if this committee was not the old committee of last year, called "The Committee on Treatment of Uterine Cancer."

The President replied that it is a committee to take the place of that committee, with increased functions.

Dr. Lewis asked the committee to report on two resolutions which were referred to it last year; one which was introduced by Dr. Prince A. Morrow, New York, emanating from the Section on Hygiene and Sanitary Science, and the other introduced by Dr. L. Duncan Bulkley, New York, concerning the reporting of venereal diseases, also emanating from this section.

The President replied that these resolutions, so far as he could remember, were not referred to this committee last year; therefore, the committee could not be expected to make a report on them.

The motion of Dr. Jones was then put and carried, and the report was so referred. (See page 2051.)

Amendments to By-Laws.

Dr. Alexander R. Craig, Pennsylvania, presented the following amendments to the By-laws, which were referred to the Reference Committee on Amendments to the Constitution and By-Laws: (See page 2054.)

Chapter X—Committees. (*Page 18*). *Section 3.*—Insert after paragraph (d) the following: (e) Board of Public Instruction on Medical Subjects. Also add: (page 21) Section 8. Board of Public Instruction on Medical Subjects. The Board of Public Instruction shall consist of seven members. Two members shall be appointed to serve for four years, two for three years, two for two years, and one for one year. Thereafter the tenure of office shall be four years.

The Board shall organize, shall elect a Chairman, and shall adopt such regulations for the government of its actions as it deems expedient.

The functions of the Board shall be: To supply the community at large with established facts regarding matters of general moment and public health; to supply these facts ethically, in good taste, and without the element of individual advancement; to harmonize and give the added value of combined effort to the several interests which are now working independently for the common good along medical lines; to direct this work under the auspices of the American Medical Association, thus giving unity of purpose among the workers and public expression to the aim and aspirations of this national Association.

Re-number following sections of the chapter.

ALEXANDER R. CRAIG.

Resolutions on Sexual Hygiene.

REFERRED TO REFERENCE COMMITTEE ON HYGIENE AND SANITARY SCIENCE.

Dr. Denslow Lewis, Chicago, offered the following preamble and resolutions, which were referred to the Reference Committee on Hygiene and Public Health: (See page 2051.)

WHEREAS: We recognize the value of publicity in the prophylaxis of the venereal diseases, criminal abortion, illegitimacy, infanticide and prostitution; and

WHEREAS: We appreciate the necessity of diffusing accurate knowledge regarding sexual hygiene and the dangers of venereal infection; therefore be it

Resolved, That we commend to all educators the advisability of teaching the truth regarding the healthfulness of continence, the physiology of the whole body, and the possibility of innocent infection.

Resolved, That, for the purpose of imparting needful knowledge, and, at the same time, safeguarding the young against corrupting information, we favor, in lieu of the present laws against "obscene" literature, the enactment of laws which shall put the postal matter of the immature wholly within the control of parents or guardians. We favor such other proper legislation, having application only to the immature, which shall be so definite in meaning that there will be no doubt as to what is prohibitive and which will not preclude any adult from acquiring full and complete information regarding all scientific subjects.

Resolved, That we recommend the amendment of all national and state laws so as to declare that no prohibition contained in them shall be deemed to apply to any serious discussion of sexual facts or conditions or to any consideration of prophylaxis, especially if such information is promulgated by the American Medical Association or any of its component societies, the American Society of Sanitary and Moral Prophylaxis, the National Purity Federation, the National Educational Association, or by other societies of recognized standing in the community which are acknowledged to have the interests of humanity at heart.

Communication from American Pharmaceutical Association.

The General Secretary read a letter from Charles Caspari, Jr., General Secretary of the American Pharmaceutical Association, as follows:

My Dear Sir:—I have the honor of informing you that President Eliot has appointed the following gentlemen as delegates from the American Pharmaceutical Association to convey cordial fraternal greetings to the American Medical Association on the occasion of its next annual meeting: Joseph P. Remington, Philadelphia, Pa., chairman; M. I. Wilbert, Philadelphia, Pa.; Henry Kraemer, Philadelphia, Pa.; George C. Diekman, New York City; William A.

Puckner, Chicago, Ill.; O. Raubenheimer, New York City; William J. Schieffelin, New York City; A. M. Roehrig, Stapleton, N. Y.; Charles Caspari, Jr., Baltimore, Md., E. H. LaPierre, Cambridgeport, Mass.

On motion, the House of Delegates then adjourned to meet Tuesday at 2 p. m.

Third Meeting—Tuesday Afternoon, June 4

The House of Delegates met at 2 p. m. and was called to order by President Bryant. The Secretary called the roll, and sixty-six members responded.

The Secretary read the minutes of the previous meeting, and they were approved.

Report of Reference Committee on Amendments to the Constitution and By-Laws.

Dr. George W. Guthrie, Pennsylvania, chairman, presented the following report of the Reference Committee on Amendments to the Constitution and By-Laws:

TRUSTEES NOT ELIGIBLE AS DELEGATES.

1. The proposed amendment to the Constitution, Article V, Section 1, page 2, presented at the last annual session, is as follows:

After the words "in accordance with the By-Laws hereinafter provided" on line 9 of the Section, insert: "Provided, however, that no Constituent Association, Scientific Section of the American Medical Association, or Medical Department of the Army, the Navy or the U. S. Public Health and Marine-Hospital Service may be represented in the House of Delegates by a member of the Board of Trustees of the American Medical Association."

The committee recommends the adoption of this amendment to the Constitution.

JUDICIAL COUNCIL REORGANIZED.

2. The proposed amendment to Section 4, Chapter 10, Book 3 of the By-Laws, page 18—Judicial Council—presented at the session of 1906 is as follows:

To strike out all the first sentence of the section after the words "five members," and insert in lieu thereof the words, "To be appointed by the President on the first day of each annual session from the delegates present and to continue in office until their successors are appointed."

On this amendment, the committee is not ready to report. (See page 2055.)

ASSOCIATE MEMBERS.

3. The committee recommends the adoption of the amendments and the By-Laws in manner and form as recommended by General Secretary Simmons, as follows:

A new section, to be Section 3, Chapter 3, Book 1 of the By-Laws, shall read as follows:

Section 3.—Associate Members.—Representative teachers, students of sciences allied to medicine, resident in the United States, and not eligible to regular membership, may become associate members of this Association on recommendation of the officers of a section and on election by the House of Delegates. Such members shall be designated as associate members.

The present Section 3 to become Section 4 and to be amended by the insertion of the words "and associate," following the word "pharmaceutical," making the section read as follows:

Section 4.—Privileges.—Dental, pharmaceutical and associate members shall enjoy the same privileges as regular members, and shall be subject to the same conditions.

The present Section 4 to become Section 5, and to be amended by inserting the word "three" following "two" in the second line of the Section, making it read as follows:

Section 5.—Forfeiture of Membership.—Membership obtained under Sections 1, 2 and 3 of this chapter may be declared forfeited by the House of Delegates for reasons considered sufficient for that body.

INVITED GUESTS.

A new section to be known as Section 6, to be inserted and to read as follows:

Section 6. Invited Guests.—Representative teachers, students of sciences allied to medicine, and distinguished physicians of foreign countries may be invited by the general officers or by the officers of a section to attend the annual session and to take part in the scientific work. They shall be designated as invited guests; they shall hold their connection with this Association until the close of the annual session to which they are invited, and shall be entitled to participate in the scientific and social functions of the Association.

Present Section 6 to become Section 7.

Present Section 7 to become Section 8.

ROLL CALL.

We recommend that Book 2, Chapter 5, Section 1 of the By-Laws be amended in accordance with the recommendation of General Secretary Simmons by inserting "Roll Call" as the second item in the Order of Business of the House of Delegates, and that the succeeding numbers be changed accordingly.

REPORTS AND ELECTIONS.

4. The amendments to the By-Laws proposed by Dr. J. W. Grosvenor, New York are as follows:

All reports presented to the House of Delegates shall be acted on seriatim, except such reports as contain only one proposition.

In balloting for all elective officers and for the place of meeting of the Association, each member of the House of Delegates shall cast his own ballot.

Your committee recommends that these amendments be not adopted. GEO. W. GUTHRIE, Chairman.

After the reading of the report, Dr. Frank Billings, Illinois, moved that it be considered seriatim.

This motion was duly seconded and carried.

Section 1 of the Report was read, and, on motion of Dr. Alexander R. Craig, Pennsylvania, seconded by Dr J. L. Wiggin, Illinois, was adopted.

Section 2 was read, but as the committee was not ready to report on this, the Section was passed.

The portion of Section 3 relating to associate members was read, and, on motion of Dr Adam Guthrie, Arkansas, seconded by several, was adopted.

The remainder of Section 3 relating to roll-call was read, and on motion of Dr C. E. Cantrell, Texas, seconded by Dr. Philip Mills Jones, California, was adopted.

AMENDMENT REGARDING REPORTS NOT ADOPTED.

The portion of Section 4 relating to an amendment offered by Dr. J. W. Grosvenor, New York, that all reports presented to the House of Delegates shall be acted on seriatim, was read.

Dr C. S. Bacon, Illinois, moved that the recommendation of the committee regarding these amendments be concurred in. Seconded.

DR. J. W. GROSVENOR, Buffalo, New York:—*Mr. President and Members of the House:* It must be known to most of those present that there has been more or less criticism concerning the reports of this body in the past in this respect, that they have not gone sufficiently into details. They have been wholesale rather than retail reports, and this criticism sometimes has been severe and spread abroad to such a large extent that it occurs to me it might be possible, by placing an amendment of the description that has been read to you in our organic law, we could disarm, in a large measure, the critics who are making these severe criticisms against this body, and therefore, I have formulated the amendment that has been presented to the House. I believe that some of our reports in the past have not given sufficient details.

Some years ago, when this Constitution was adopted, if I remember rightly, it was not taken up seriatim. There was one member who offered a single amendment, which was adopted, and only one amendment was adopted at that time. A motion was then made that the whole report be adopted, the report not being taken up seriatim or in detail at all. Those who were present will recall that on that occasion there was very little time given for the discussion of the Constitution seriatim, and I have been exceedingly sorry that was not done, for I believe that if our Constitution had been considered section by section, there would not have been a necessity for making so many amendments to it, and I believe we would all be better satisfied with the Constitution we had or have. Last year, I remember, when a member made a motion that a certain report be taken up seriatim it was voted down. I do not know for what reason. Therefore, it seems to me it can do no harm, and it may do us great good, to take up these reports in a more thorough and systematic manner and discuss them carefully and thoroughly. If this is done, it will not be necessary to change the By-Laws so often. I am most heartily in favor of this amendment, and I feel sure it will do our organization good.

DR. R. C. CABOT, Boston:—Dr. Grosvenor has remarked that if his amendment should carry, it would have the effect of disarming the critics of the work of the House of Delegates. I doubt that very much. If this amendment should prevail, it would make it impossible for this body to despatch business as promptly as it would wish in disposing of certain reports. There are times when it is necessary for us to go slow, while at other times it is equally necessary for us to move quickly. Now, if this amendment is carried we shall always have to go slow. It seems to me that this House of Delegates wants to keep busy, and it is unnecessary to consider certain reports brought before this body in such detail and with such care and thoroughness as Dr. Grosvenor intimates. Some reports

can be disposed of quickly, while others require more mature deliberation. I do not think it would be wise for this amendment to be passed by this House of Delegates.

DR. GEO. W. GUTHRIE, Pennsylvania:—The Committee invited Dr. Grosvenor to appear before it and to present his arguments. He did so, and those arguments were much the same as the ones he has just advanced. As Dr. Cabot has remarked, if this amendment is accepted, it seems to me we would be depriving ourselves of the elements of deliberation and of the opportunity of despatching business promptly, and I do not think it is necessary for us to fix an ironclad rule, by considering every report that is brought before this body seriatim.

The motion of Dr. C. S. Bacon was then put and carried.

AMENDMENT REGARDING ELECTION NOT ADOPTED.

The portion of Section 5 of the report relative to balloting for all elective officers, etc., was read.

Dr. Alexander R. Craig, Pennsylvania, moved that the recommendation of the committee regarding this amendment be concurred in. Seconded.

DR. J. W. GROSVENOR, Buffalo, New York:—In offering this amendment, I am trying to promote the interests of the Association, and of this House of Delegates, and the Association, I think, will agree with me, that I am on the right track. You have all noticed occasionally in this House of Delegates, that whenever a name was placed before us for office, some one has risen and made a motion to the effect that the Secretary or some other officer be designated to cast the unanimous vote of the body for the election of that gentleman. This amendment is offered for the purpose of providing a suitable way of doing away with that method of transacting business. Our By-Laws state that the officers shall be elected by ballot, and I believe the object of these By-Laws in this regard was to give each member of this body an opportunity to express his own opinion by means of a ballot. Of course, you may say that a member has the opportunity of expressing his opinion by voting either for or against such a motion. When such a motion is made, the member has the privilege of adopting one of two courses. He can vote for it, or can refuse to vote for it. It is his privilege to do one of those two things. I do not believe myself that an officer should be elected in any other way than by ballot, because a member may wish, or several members may wish, to vote for somebody besides a certain person designated. A man may not like to oppose such a motion against a candidate, as that candidate may be his friend; hence there is a good deal of timidity on the part of many members of this body about voting against such a motion. I am not alone, Mr. President, in my belief that officers should be balloted for. There are other people who may want to get some of the offices. If we vote in accordance with a motion such as I have mentioned, we simply elect a man by acclamation, not by ballot. By designating some one to cast the ballot of the Association for a candidate, it is simply a mechanical ballot, nothing more nor less, and we really violate our rules when we adopt such a method. That is my opinion in reference to it. I hold in my hand a copy of Roberts' Rules of Order, which has been adopted by this House as its guide on parliamentary law. (Here Dr. Grosvenor read from Roberts' Rules of Order regarding the election of officers by ballot and otherwise.) If the election of officers is carried on as it ought to be, I believe it would take much less time than it does now in the way which I have pointed out, according to the motion mentioned. I am in favor of the adoption of this amendment, and I trust it will be carefully considered by the members before a vote is taken on it.

DR. C. E. CANTRELL, Texas:—Your committee thinks that this amendment is entirely superfluous and unnecessary. It would put us through a rule of procedure that is absolutely unnecessary, for the reason that if there is more than one candidate a ballot must be taken. If there is a single member on the floor of this House who objects to the election in any other way than by ballot, a ballot must be taken; yet, where there is but one candidate, and the House of Delegates wants to get through with its work, so that its members may attend the scientific meetings, if we adopt this amendment, we can only elect officers by going through the process of casting a formal ballot, which I regard as entirely unnecessary under such circumstances, and that is the reason the note, which the gentleman has read to us, from Roberts' Rules of Order, is published, so that an officer may be designated to cast the unanimous ballot of the Association for a candidate, in order to dispose of these things promptly. If we spent less time in transacting business of the House of Delegates, and devoted more of it to scientific work, we would all be better off, and the less law we have the better we would be. (Applause.)

DR. ADAM GUTHRIE, Arkansas:—I am more than willing to go down in defeat, as I was about to say, in recording myself as being willing to stand by the sacredness of the ballot, even in the American Medical Association. As much as I respect the personnel of the committee, and as much as I know they know more than I do about our Constitution and By-Laws, I have that respect for the feeling of one man that it should not be necessary to destroy the sacredness of the ballot by a single objection. I hope my friend from Texas will not think it is too great a burden to elect the officers of the American Medical Association in the very best way that can be done and covering it with everything that makes the ballot sacred.

DR. G. W. GUTHRIE, Pennsylvania:—I would say, in response to my namesake from Arkansas, that this does not destroy the sacredness of the ballot. It does not say that the officers shall not be elected by ballot, for if there is one objection made, it simply means that every member must cast his ballot. It seems to me, that if a deliberative body unanimously decides that the Secretary shall cast the ballot of that body for an officer, then they are voting by ballot. As Dr. Cantrell says, if there is only one candidate for an office, and the Secretary is instructed to cast the unanimous ballot of the body for that candidate, then this one vote expresses its sentiment unanimously. I do not see that this is not voting by ballot. If we fasten ourselves to some ironclad rule, no matter how insignificant the office is, we must go through the formality of having every member cast his own ballot. This is depriving us of liberty of choice, and, as Dr. Cantrell has remarked, if there is one single objection either by Dr. Grosvenor or by the gentleman from Arkansas, a ballot must be taken.

There being no further discussion, the motion of Dr. Craig was put and carried.

Dr. Frank Billings, Illinois, moved that the report of the committee be adopted as a whole, which was seconded and carried.

Report of the Committee on Scientific Research.

REFERRED TO BOARD OF TRUSTEES.

In the absence of the chairman of this committee, the General Secretary read the following report:

Gentlemen:—Your committee would report that in accordance with the regulations of the Board of Trustees, four grants have been made for the year 1907, viz.: Dr. G. F. Ruediger, Chicago, for a continuation of his work on the "Bacteria of Scarlatinal and Normal Throats;" Dr. H. T. Ricketts, Chicago, for a further study on "Rocky Mountain Spotted Fever;" Dr. Richard M. Pearce, Albany, for an "Investigation of the Nature of the Proteid Soap Compounds and of the Staining of Pure Fats and Lipoids by Scharlach and Soudan III."

The amount of these grants is: For the first two $200 each, and for the third $100

A grant of $50 has also been offered to Dr. J. N. Wainwright of Scranton, Pa., for some experimental investigations regarding carcinoma.

Application has also been received from Drs. D. J. McCarthy and M. K. Meyers, Philadelphia, for a study of experimental cerebral thrombosis. This application, however, was too late for consideration during the present year.

Your committee would further report that its attitude has been to restrict the grants as far as possible, giving aid only where it might be worthily bestowed and where the lack of other endowment justified such expenditure. The entire amount appropriated for the purposes of the committee has not been exhausted, but it is hoped that the appropriation will be continued in the same amount in future years, as the expenditures have been carefully made and demands of such a nature as the committee will consider proper will doubtless grow more frequent. The inquiries received during the last six months would indicate that the entire amount will be necessary to meet the legitimate needs in the forthcoming year.

ALFRED STENGEL, Chairman.

Dr. Alexander R. Craig, Pennsylvania, moved that the report be accepted and referred to the Board of Trustees for consideration and report to the House of Delegates with recommendations.

Seconded and carried.

Report of Committee on Davis Memorial Fund.

The General Secretary read this report, as follows:

I beg to report the receipt of the following amounts:

Dr. William Louis Rabi, Dwight, Ill.	$ 0.25
Dr. J. H. Harrison, Treas. Utah State Med. Assn.	50.00
Dr. I. C. Smith, San Diego, Cal.	.25
Dr. E. O. Barker, Oklahoma State Medical Assn.	6.00
Dr. G. M. Waterhouse, Weiser, Idaho.	25.00
Dr J. F. Hunter, Mississippi State Medical Assn.	100.00
Dr. G. W. Gay, 665 Boylston St., Boston.	1.00
Dr. R. H. Fitz, Arlington St., Boston.	10.00
	$192.50

There are a number of subscriptions promised, with the assurance on the part of the different members of the committee of a far more satisfactory report from them during the ensuing year. The committee has been requested to remit direct to Dr. Billings, the Treasurer, any amounts which it may receive.

HENRY O. MARCY, Chairman.

Dr. Frank Billings, Illinois, said that last year there was turned over to him by Dr. Marcy $192.50, which was placed in the Savings Bank Department of the Northern Trust Company, Chicago, drawing 3 per cent. interest.

On motion, these reports were accepted and the committee continued.

Report of the Reference Committee on Hygiene and Public Health.

RESOLUTION REGARDING CRIPPLED CHILDREN APPROVED.

We, the undersigned, members of the Reference Committee on Hygiene and Public Health, submit the following report on the resolution submitted by Dr. Frank Billings, Illinois, (see page 1969) relating to the improvement by modern scientific treatment of deformed and ruptured children. The committee heartily approves this resolution, and recommends favorable action by the House of Delegates.

On motion of Dr. Alexander R. Craig, Pennsylvania, the recommendation of the committee was concurred in.

BOARD OF PUBLIC INSTRUCTION ENDORSED.

Your committee submits the following recommendation on the report of the Committee on the Establishment of a Board of Public Instruction, John G. Clark, chairman (see page 2046):

The committee heartily endorses this very excellent report, with the exception of the last two paragraphs, headed "cost of maintenance," this subject apparently not coming within the jurisdiction of this committee. Your committee further approves the suggestion that the articles be unsigned by the authors, but recommends that this phase of the problem be submitted to the House of Delegates for a vote, as recommended by the Committee on the Establishment of a Board of Public Instruction.

Dr. W. N. Wishard, Indiana, moved that this report of the committee be adopted, with the recommendation relative to the establishment of a Board of Public Instruction, including the suggestion of the committee that the articles be unsigned.

Seconded and carried.

The committee begs to submit the following report on the resolution submitted by Dr. Denslow Lewis (see page 2048): As this matter appears to be closely related to the subject included in the report of the Committee on the Establishment of a Board of Public Instruction, we recommend that the resolution of Dr. Lewis be referred to said committee for further consideration.

CHARLES J. KIPP,
R. M. WOODWARD,
WILLIAM N. WISHARD, Chairman.

On motion of Dr. Philip Mills Jones, California, the recommendations of the committee were concurred in. On further motion, the report and its recommendations were adopted as a whole.

Report of Reference Committee on Sections and Section Work.

SENN MEDAL.

This committee, to whom was referred the report of the Committee on the Senn Medal (see page 1965) recommends that the report of said committee be referred to the Executive Committee of the Section on Surgery and Anatomy.

LEARTUS CONNOR, Chairman.

On motion of Dr. C. E. Cantrell, Texas, the recommendation of the committee was concurred in.

Report of Reference Committee on Legislation and Political Action.

Dr. C. S. Bacon, Illinois, chairman, presented the following report of the Reference Committee on Legislation and Political Action:

WORK OF THE COMMITTEE ON LEGISLATION.

To this committee has been referred the report of the Standing Committee on Medical Legislation, which consists of a summary of the work of the committee during the past year, and also a record of the conference of the Committee on Medical Legislation with the National Legislative Council, held at Washington, D. C., Dec. 13-15, 1906, and published in THE JOURNAL, Jan. 26, 1907. This report records the passage or successful issue of several bills and measures that have received the support of the Association and the committee and the defeat of one measure that was opposed by the Association. These include the final passage of the Food and Drugs Act, the bill for the relief of Dr. James Carroll, the beginning of a general hospital for the Army, the establishment of a satisfactory status of the medical service in the Isthmian Canal Zone, the provision for medical representation on the general staff of the Army, and the defeat of the osteopathic bill for the District of Columbia. In the record of the Washington conference appears more in detail the work done in the achievement of these ends. For the persistent self-sacrificing and laborious work required to attain these satisfactory results, your reference committee recommends that the thanks of the House of Delegates be extended to the Committee on Legislation and to its associate and auxiliary committees.

The report shows that some measures that have received the endorsement of the American Medical Association and the earnest support of its committees, have failed; the causes of these failures are analyzed, and, in some cases, determined.

ARMY MEDICAL REORGANIZATION BILL ENDORSED.

Your reference committee would recommend that the House of Delegates re-endorse the Army Medical Reorganization Bill, and direct its legislative committee to aid in every way possible in securing the passage of the bill by the next Congress.

ARMY CANTEEN BILL ENDORSED.

Your committee would also make the same recommendation in regard to the Army Canteen Bill.

In regard to the Hammond Bill, your committee, uncertain as to the present status of the matter and of the purport of the previous action of Congress, would recommend that further action be left to the discretion of the Committee on Medical Legislation.

DEPARTMENT OF PUBLIC HEALTH.

In the matter of the creation of a department or bureau of public health, your Reference Committee recommends the adoption of the suggestion of the Committee on Legislation, namely, that the question of the details of the organization, powers and status of the National Public Health Agency be left to the Committee of One Hundred, to which it pledges its confidence and support.

TRAINED NURSES FOR THE NAVY.

Your committee also recommends that the House of Delegates endorse the principle of the proposed bill of Surgeon-General Rixey to provide trained nurses for the Navy.

PHYSICIANS IN CONGRESS.

Your reference committee agrees with the Committee on Legislation in its views concerning the importance of having actual representation of the medical profession on the floor of Congress, and it is hoped that a larger number of physicians than heretofore will offer themselves for both branches of Congress. In this connection, as a mark of appreciation of the valuable services of the physicians who were members of the House and who aided so greatly your committee in its Washington conference and who secured the defeat of the osteopathic bill in the committee of the house, it would recommend the adoption of the following resolutions by the House of Delegates:

Resolved, That the House of Delegates of the American Medical Association, assembled in Atlantic City, on this, the 4th day of June, 1907, hereby expresses to Hon. Andrew Jackson Barchfeld, representative from the Thirty-second Pennsylvania District, to Hon. Hiram Rodney Burton, representative-at-large from the State of Delaware, and to Hon. Edmund William Samuels, representative from the Sixteenth Pennsylvania District, its high appreciation of their valuable counsel to the Committee on Legislation of the American Medical Association in conference in Washington, December, 1906, and its sincere thanks for their efficient service in securing the defeat of the osteopathic bill in the committee of the house; and,

Resolved, That these resolutions be entered on the minutes of the Association and published in THE JOURNAL, and that a

copy of them be forwarded by the Secretary of the American Medical Association to each of these representatives.

In accordance with the request of the chairman of the Committee on Medical Legislation, your committee would call attention to the importance of having a full representation of the states in the conferences of the Committee on Legislation with the National Legislative Council, and would urge that the state associations make appropriations to meet at least the traveling expenses of their delegates when attending these conferences.

UNIFORM STATE LAWS.

In reference to the subject of "Uniform State Laws" and an "Enlarged Legislative Policy," the Committee on Legislation has urged the necessity of taking an important step looking to the promulgation of standard bills to be passed by state legislatures, and has recognized that with the increased necessity for the formulation of certain standard laws must come an increased necessity for securing their adoption by the different states, and that this, in turn, must call for a more or less uniform and harmonious organization with which to carry the plan into effect.

Your committee wishes to commend most heartily this proposition for an enlarged legislative policy, not restricted as largely heretofore to dealing with questions of strictly national concern, but embracing the public interests of the medical societies and of the profession in all the states and municipalities of the nation. It regards this question as one of fundamental importance. It conceives, for example, that the very valuable work of your Council on Education can be quickly undone if a number of states pass laws creating, from osteopaths and Christian scientists, a class of medical practitioners that, by further laws, may soon become endowed with all the powers and functions now accorded to physicians. It sees a sufficient reason for the cooperation of our legislative committees with the legislative committees of the state societies in the fact that the National Association of Osteopaths and the National Proprietary Association work quietly, but most effectively, in supporting the local measures in which they are interested in the various state legislatures. It sees further need of this national assistance to the state societies in the great differences and inconsistencies in the activities of the profession in different states.

Your committee believes that the Committee on Legislation, through the Bureau of Medical Legislation, should study the questions of public policy in the different states and sections of the country, analyze and establish the principles which should govern the state and municipal legislative activities, formulate standard laws for local guidance, and investigate and advise as to the proper and efficient methods for securing the passage of these acts and for carrying such laws into effect.

Your committee, therefore, recommends that the House of Delegates ask the Board of Trustees of the Association to provide for such increase in the clerical help of the Bureau of Medical Legislation as will enable it to conduct these investigations and prosecute successfully the further objects of this enlarged policy.

P. W. TOMLINSON,
HUBERT WORK,
J. H. HAMILTON,
C. S. BACON, Chairman.

Dr. Philip Mills Jones, California, moved the adoption of the report, with the resolutions contained therein.

Seconded by Dr. Alexander R. Craig, Pennsylvania.

DISCUSSION ON ARMY CANTEEN.

DR. J. W. GROSVENOR, New York:—There is one part of this report that I do not agree with. I understand that this reference committee recommends or approves of the restoration of the Army canteen. I do not believe that we, as a House of Delegates, ought to take any such action at the present time. While the statement is made in the report of increasing demoralization among the soldiers, which has followed as the result of the abolition of the Army canteen, it is doubtful whether anything of that kind is the result of the abolition of the canteen. I have examined recently six of the reports from the War Office, and, so far as desertion is concerned, there is only one year in which desertion is represented as the result of the abolition of the canteen, and this is mentioned incidentally.

So fas as sickness is concerned, the reports show that there has not been so much sickness since the abolition of the canteen; and, so far as demoralization is concerned, I do not think we can judge at the present time whether this has followed the abolition of the canteen or not. I do not think sufficient time has elapsed to determine that with certainty. I think it is unwise for us before we can determine that fact to place ourselves on record in favor of the restoration of the canteen.

I desire to move as an amendment that, so far as this part of the report is concerned, this House of Delegates do not concur in the recommendation made by the committee. (This was seconded.)

I am sure most officers of the Army are interested in everything that is calculated to promote the moral and physical welfare of the men under them. I am well aware, however, that there are some officers of the Army who recommend the restoration of the canteen. I am also very well aware that there is a large proportion of officers of the Army who are opposed to the restoration of the canteen, and among them I may mention Dr. Wise. General Sheridan was interviewed with reference to this point, so far as the restoration of the canteen is concerned, after it had been suggested that some method should be proposed whereby a canteen should not be opened within five miles of any army post, and said, "You say five miles; put it at ten." That shows his idea in reference to the restoration of the army canteen. I do not think it would be wise for this House to concur in the action recommended by the committee as to this part of the report; therefore, I hope that my amendment will prevail.

DR. F. D. REESE, New York:—This question is largely a moral, and not a scientific, one, and consequently it should not engage the attention of this body. I am, therefore, in favor of the amendment.

DR. CHARLES A. L. REED, Ohio:—I did not hear all of the remarks made by the previous speakers with reference to the restoration of the canteen. I have seen but little of its practical workings. But the testimony on which I rely and on which the Committee on Medical Legislation has relied in making the recommendations which it has seen fit to make to Congress, is weighty and scientific, in that we are dealing with the physical welfare of the Army, as well as the moral aspect of our men in the Army, to which we can not, as the conservators of the best interests of the public, close our eyes.

On one occasion, at a hearing given by the House Committee on Military Affairs, there was a delegation of ladies, charming, dignified, elegant women, who appeared before the committee. The chairman of that delegation was the widow of one of the most distinguished officers of the United States Army, and the other members of that delegation were the wives and daughters of other officers of the United States Army—women who had gone all over this country with their husbands in the discharge of their official duties—and I shall never forget the great impressiveness with which that venerable woman stated to that committee words to this effect: "Mr. President, I have been identified with my husband, an officer of the United States Army, for forty years; I have served with him at every post in the United States, and I have had occasion to watch the operation of the canteen and to observe the condition of the men in the absence of the canteen, and I am prepared to say that we, as the wives of the officers, are deeply interested in the physical and moral welfare of the army officers and soldiers, and we have had occasion to note that, where canteen discipline was maintained, immorality was repressed, and all the things that are objectionable, which can be attributed to indulgence in alcoholic drinks, were reduced to a minimum. We know from personal experience that, since the abolition of the canteen, the physical condition and moral status of the Army have alike deteriorated in consequence of the absence of it."

Mr. President, that was all the testimony I wanted on that occasion on that subject. But if I wanted, and the committee wished, more testimony to the same effect, it could be accumulated by practically everybody who is connected with the practical administration of the affairs of the United States Army. It was for these reasons, sir, that the committee made the recommendation it did, and I trust that the members of this House of Delegates, who are not given to fanatical views on any particular question, will recognize the practical importance, the scientific importance, of this question, and will sustain the recommendation made by the Reference Committee on Legislation and Political Action. (Applause.)

DR. PHILIP MILLS JONES, California:—I have not read the reports of the Army for the last four years. I am not interested in this matter as a question of abstract ethics; but I live in a city where there is a large army corps, and I have seen the practical workings of the abolition of the army canteen. When the army canteen was located within the Presidio at San Francisco, the vicinity of the Presidio was regarded as a very desirable residence section. The soldiers were quiet

and orderly. Almost immediately on the abandonment of the canteen, shacks of all sorts and descriptions sprang up about the gates of the Presidio, and in place of reasonable peace and quietude there was substituted a condition of chronic drunkenness and disorder, and on several occasions a riot, so that it was necessary to bring out the reserves of the police department, as well as several companies of regulars of the Army to quiet them. That, Mr. President, is a condition which has continued almost without interruption since the abolition of the army canteen.

DR. F. D. REESE, New York:—I was much interested in Dr. Reed's remarks, and, as he has quoted from one person, I wish to quote from a hundred—in exact numbers ninety. I have asked eighty out of ninety young men, who served in the Cuban Army, their opinions about the abolition of the canteen, and they all said it was a good thing. I said to them, "Would you say this to the officers of the Army?" They replied, "No, sir; we would not dare make such a statement to Army officers." That is actual knowledge which I have obtained from these soldiers.

Now, gentlemen, the idea that the restoration of the canteen (and that means the sale of light drinks, such as beer, and occasionally whisky smuggled in) will increase or develop the morals of the soldiers is absurd. Just think how absurd such a proposition is! Why does not our Government prohibit the sale of liquors within ten or fifteen miles from an Army post, instead of allowing them to establish canteens within or near these posts. (Laughter.) This is not a laughable matter, gentlemen. It is a question that appeals to the mothers of the country. Our mothers are not fools. The women of the W. C. T. U. are not fools. They have furnished us the boys that have been sent to the Army, and they are familiar with the stories of the boys when they come home.

Let me relate the case of a captain who came home and was buried in our town. He never drank a drop of liquor until he went to Cuba as an officer of the Army. He became intoxicated and got into a fight with another soldier, who killed him.

Now, to make a long story short, we need to have more exact knowledge and more reliable information on this question before we can intelligently vote on it.

DR. ADAM GUTHRIE, Arkansas:—It seems to me that this subject has provoked some mirth on the part of some of the members. I do not see why it should. If the question was asked of the learned gentlemen who constitute this body, how many would recommend whisky as a medicine at this late date and time and as a necessary part of the rations and of the doctor's armamentarium in the army, I venture to say not a dozen would stand up. I do not believe a dozen would say that alcohol is now held with anything like the respect that it used to be, nor is it held to be as valuable a remedy as it was formerly. So we are put in the attitude of reforming the morals of the United States Army by helping a lot of soldiers to get drunk and teaching the younger ones how to drink. It seems to me that is what we are apt to do. This legislative body of the American Medical Association is asked to put its stamp of approval on it, not as a measure that alcohol is no longer considered by up-to-date scientific physicians as a valuable agent to treat any class of diseases, not as an essential food, but, according to the report of the committee, the way to reform the Army of the United States of America and to sustain and maintain the highest standard of manhood and fighting qualities of the members of the army is by restoring the canteen. That is all there is to this proposition. But I do not think we can secure the highest standard of manhood by restoring the canteen. I do not think we can reform the morals of the United States Army with whisky, and that is what the question amounts to. It seems to me to be a question of maintaining the morals by teaching these young men how to drink. I hope that the House of Delegates will not endorse that part of the committee's report, for if the strong arm of the law and discipline of the Army can not be carried out without whisky, without the canteen, then the arm of discipline is not strong enough, and the defect is not in the want of whisky, but in the want of a better organized form of discipline.

DR. CHARLES A. L. REED, Ohio:—The last speaker really intends to be accurate. His zeal is manifest; his enthusiasm is obvious, and there is an evident desire on his part to be fair in his representation; but certainly the very opposite of what he has said is the true condition of affairs. The object of the restoration of the canteen is to repress drunkenness, and the experience of army officers has been to the effect that the existence of the canteen, as compared with the absence of it, has been to repress drunkenness and the greater consumption of alcohol. You and I know that a perfectly idealistic humanity does not exist, nor do perfectly idealistic conditions exist, and the tendency among the type of men who make up the rank and file of the United States Army is to drink, and it has been clearly demonstrated that the existence of the canteen minimizes the opportunity for drinking. The moment you take away the canteen you have all kinds of indulgences that result in extreme dissipation, and in the demoralization which now exists. I trust the members of the House of Delegates will endorse the recommendation of the committee. As I take it, it is the desire of this committee and of this House not to support dissipation, but, in the light of the evidence, to repress it.

DR. N. FRED ESSIG, Washington:—This is a moral question. We can not get medical legislation on morals. Let us confine ourselves to those matters of legislation which will be of benefit to the medical profession and to the community at large. Let those who are interested in the Army and our legislators, who are ready, at all times, to give us legislation on other subjects, devote their attention to this matter. I do not consider that it is the business of this body to meddle with a question which is strictly moral. Let us confine ourselves to matters of legislation which will be of great importance to the profession and to the communities in which we reside. I trust that this part of the report will be eliminated, and that this great organization will not place itself on record as dictating in any manner whatever its position on the liquor question. (Applause.)

DR. JOHN M. GILE, New Hampshire:—It seems to me the last speaker has struck the keynote. I think this body would be unwise to enter into anything that savors of politics. There are very much broader subjects than this one of the army canteen which we can discuss, and I think it would be foolish on our part to place ourselves on record in regard to this question. While I believe in the restoration of the canteen I do not believe it is wise for the American Medical Association, through its House of Delegates, to offer any recommendations in the case. The discussion shows it. (Applause.)

At this juncture there were cries of "Question!" "Question!"

The Chair recognized MAJOR CHARLES RICHARD, United States Army, who said:

There seems to be a misconception of what the canteen is among the gentlemen present here this afternoon. To a certain extent, it is a moral question, and perhaps should not properly, for that reason, come before the House of Delegates. However, after an experience of thirty years in the service, I do not hesitate to say that it affects the health of the enlisted men of the army. The canteen was originally established with a view to furnishing a place where the soldiers could go and get a little beer if they wanted it or other refreshments; where they could read the journals, magazines and newspapers; where they could engage in a game of billiards, or a game of cards; in other words, where the soldiers had their club. It was a general amusement room at the same time; the sale of beer was incidental to that club. It is unfortunate it should have been named canteen, because the word canteen suggested drink. When the canteen was abolished, the soldier was driven from his barracks and sought amusement elsewhere. The surroundings of every military post are largely made up of dives. The soldier frequents these dives, where he becomes loaded with poor whisky and loses his moral sense, and, as a result, venereal disease has increased since the abolition of the canteen to a great extent in our Army. With all due deference to Dr. Grosvenor, I know it is a fact that venereal disease has increased since the abolition of the canteen.

DR. J. L. WIGGIN, Illinois:—Forty per cent.

DR. RICHARD (resuming):—This gentleman says 40 per cent. The soldier is not required to drink at the canteen. He goes there for amusement. Like a gentlemen who goes to his club, he does not have to drink. So it is with the soldier. He is driven from his post to a place that is far more demoralizing than the canteen. He has got to go home within a specified time and he makes most of the little time he has outside of his regular duties. The soldier, like most men, sometimes takes more than is good for him, and the result is that he contracts venereal disease, and that is why nine-tenths of the Army are in favor of the canteen. The small minority who are against its restoration have not been in the service long enough to judge of its value, or who entered the service after the abolition of the canteen.

I can heartily endorse what Dr. Reed and Dr. Jones have

said, and, as I have previously remarked, while this is really a question of morals, yet it influences the health of our enlisted men, and it is properly a hygienic question so far as this body is concerned.

DR. C. S. BACON, Illinois:—The Reference Committee, to whom this subject was referred, adopted the recommendation that had been read. *First*, because the matter has already been acted on by the Committee on Legislation of the Association, and it is a pretty good policy to accept the deliberations of a committee that has given such a subject considerable discussion. As a member of the Committee on Medical Legislation, I know that this matter was thoroughly and freely discussed by the representatives of all states in the Legislative Council. *Second*, the conclusions of the Legislative Council were based on their own investigations and on the almost unanimous opinions of Army officers. The committee also had in mind the fact that all moral questions are medical ones. We are sometimes apt to make more out of a word or term than is justified. What is a moral question, anyway? What is a medical question? Does not medicine concern itself with morals? Does not the moral condition of an individual that needs medical aid concern the medical profession? Of course, it does. I claim it is a medical question when it concerns the health of the Army. Have we not a right to approve a measure or to give our endorsement to a measure that does not imply the administration of drugs? How is it about the condition of the troops in the Philippines? We know the state of solitude these troops are in, and how it affects their efficiency. Have we not a right, therefore, to concern ourselves with the moral and physical condition of these men? I think we have.

DR. N. FRED ESSIG, Washington:—I am personally in favor of the restoration of the canteen, but I want to say this much, that we should recognize our limitations as the legislative body of the American Medical Association, and not attempt to interfere with legislation that belongs entirely outside of that which pertains to medicine. We might just as well recommend that certain clothing be worn by the soldiers, that a certain diet be prescribed for them, as to attempt to legislate for the Army in regard to morals. We want to eliminate politics to a great extent. We have enough of it. Do not let us get any more of it.

Dr. Henry W. Coe, Oregon, offered an amendment that the report of this committee be accepted, with the exception of that section of it which refers to the recommendation of the re-establishment of the Army canteen.

The amendment was seconded by Dr. S. Solis-Cohen, Section on Pharmacology and Therapeutics, who moved to amend further that the report of the committee be accepted, excepting the recommendation concerning the canteen, which shall be omitted on the ground of expediency.

This amendment was seconded and accepted.

Dr. Grosvenor thereon withdrew his amendment in favor of the one offered by Dr. Coe.

The amendment was then put and carried.

On motion, the report of the committee as amended was adopted.

Report of the Committee on Insurance.

Dr. John H. Musser, Section on Practice of Medicine, chairman, presented the report of this committee, as follows:

Your committee begs leave to present as its report:

1. The preliminary report of the committee published in THE JOURNAL of the American Medical Association, Dec. 8, 1906, page 1937.

2. The letter of Dr. Mayo, the President, which accompanies that report.

Further than this, notwithstanding various efforts to arrive at other conclusions, the committee has nothing further to report, and asks that it be discharged.

FRANK BILLING,
J. N. MCCORMACK,
WILLIAM J. MAYO,
JOHN A. WYETH,
J. H. MUSSER, Chairman.

Dr. Hubert Work, Colorado, offered the following resolution in connection with the report of the Committee on Insurance, prefacing it by saying that he introduced the resolution last year creating this committee:

Resolved, That this Association cordially approves the report of the Committee on Insurance, and urges on county societies such wise and conservative action in accordance with its spirit as will protect the interests of the humblest competent member of the organization.

Dr. C. E. Cantrell, Texas, moved that the report of the Committee on Insurance be adopted, together with the resolution offered by Dr. Work, and that both the report and the resolution be referred to the Reference Committee on Reports of Officers. (See page 2056.) Seconded and carried.

Supplementary Report of Committee on Amendments to the Constitution and By-Laws.

Dr. George W. Guthrie, Pennsylvania, chairman of the Reference Committee on Amendments to the Constitution and By-Laws, presented the following supplementary report on Dr. Craig's amendments, to be made if the Trustees and Reference Committee on Hygiene and Public Health report favorably on the report of the Committee on the Establishment of a Board of Public Instruction:

Your committee recommends the adoption of the following amendments to the By-Laws, proposed by Dr. Alexander R. Craig: (See page 2048.)

BOOK III. CHAPTER X—COMMITTEES.

(1) Section 3. (Page 18): Insert after paragraph (d) the following:

(2) (e) Board of Public Instruction on Medical Subjects.

Also add (page 21):

Section 8. Board of Public Instructions on Medical Subjects. The Board of Public Instruction shall consist of seven members. Two members shall be appointed to serve four years, two for three years, two for two years and one for one year. Thereafter the tenure of office shall be four years.

The board shall organize, shall elect a chairman, and shall adopt such regulations for the government of its actions as it deems expedient.

The functions of the board shall be: To supply the community at large with established facts regarding matters of general moment and public health. To supply these facts ethically, in good taste, and without the element of individual advancement. To harmonize and to give the added value of combined effort to the several interests which are now working independently for the common good along medical lines. To direct this work under the auspices of the American Medical Association, thus giving unity of purpose among the workers and public expression to the aim and aspirations of the National Association.

(3) Renumber following sections of the chapter.

C. E. CANTRELL,
R. C. CABOT,
GEORGE W. GUTHRIE.

Dr. L. S. McMurtry, Kentucky, moved that the recommendations of the committee be concurred in and that the amendments to the By-Laws be adopted, subject to the favorable report of the Board of Trustees and the Reference Committee on Hygiene and Public Health.

This motion was duly seconded and carried.

Action on Resolutions Asked.

DR. DENSLOW LEWIS, Section on Hygiene and Sanitary Science:—Abiding by positive and definite instructions given me by the Section on Hygiene and Sanitary Science, which I have the honor to represent in this body, I have been asked to demand respectfully that the committee, to which was referred the resolution of Dr. Prince A. Morrow, New York, a year ago, stating that continence is healthful, be requested to make some definite answer one way or another. The Section on Hygiene and Sanitary Science regards it as unfair that no action on this matter has been taken, and we respectfully demand that the matter again be called to the attention of the committee, and that some report be forthcoming before the end of this session.

The President said the members of the committee would consider themselves notified of the request of the member of the House, and he had no doubt they would act accordingly.

Chairman for Medical Congress Confirmed.

Dr. Frank Billings, Illinois, said that the Sixteenth International Medical Congress would convene at Budapest in 1909. The secretary and president of that congress had announced that Dr. J. H. Musser, Philadelphia, had been appointed chairman of the American committee.

Dr. Billings moved that the House of Delegates confirm the appointment.

This motion was duly seconded and carried.

Dr. Leartus Connor, Michigan, said there was a misunderstanding among many members as to the relative increase of funds of this Association, and, in chatting with those who know about it, they assured him that there was a less reserve fund as regards amount now than there was ten years ago, and what he desired to ask was that the Secretary or Treas-

urer be invited to present the facts on this point. He would make this as a motion.

The motion was seconded.

The President stated that this request for information would be referred to the Reference Committee on Reports of Officers.

Dr. Alexander Craig, Pennsylvania, moved that the resolutions referred to by Dr. Lewis in his remarks be recalled from the special committee to which they were referred last year, and that they be now referred to the Reference Committee on Hygiene and Public Health for consideration and for advice and report to the House of Delegates. Seconded.

The Secretary read the resolutions referred to by Dr. Lewis from the minutes of the House of Delegates of last year (1906), and said he believed that the committee of which Dr. Clark was chairman covered the subject-matter of the resolutions in the report of that committee yesterday.

DR. DENSLOW LEWIS:—I respectfully challenge any one to find in the report of the committee, to which the resolutions were referred, any direct or indirect reference to them. They were pigeon-holed, and the members of the Section on Hygiene and Sanitary Science considered this, as least, discourteous. While recognizing the healthfulness of continence, it seems evident that the subject is not popular with the members of that committee.

THE PRESIDENT:—The last remark of the gentleman is in bad taste and very unparliamentary.

The motion of Dr. Craig was then put and carried.

Cooperating Committee on International Classification.

Dr. A. T. Bristow, New York, moved that the Chairman appoint a Committee (of five) on Nomenclature and Classification of Diseases, and that this committee cooperate with representatives from other bodies interested in order to send a suitable delegation to the Paris Commission in 1909, which revises the International Classification of Causes of Death and prepares for the U. S. census of 1910.

Seconded and carried.

Control of Rabies.

Dr. R. C. Cabot, Massachusetts, offered the following preambles and resolution:

WHEREAS, The House of Delegates of the American Medical Association recognizes the needless sacrifice of human and canine life by a preventable disease, rabies, and also recognizes that by the enactment and enforcement of proper legislation it can be eradicated, as has been demonstrated in Great Britain, Germany, Sweden and other countries; and

WHEREAS, This Association is anxious that its influence and that of its members individually be earnestly directed toward the stamping out of this disease; therefore, be it

Resolved, That the House of Delegates of the American Medical Association requests its legislative committee and council to take the necessary steps to secure some such national and state legislation as the following:

1. Control of the disease in the United States placed under the supervision of the Chief of the Bureau of Animal Industry at Washington, as are other epizootic diseases, such as foot-and-mouth disease, according to the act of Congress of May 31, 1884.
2. Full authority vested in the State Cattle Commission or other properly appointed commission, to act as may be necessary for the eradication of the disease, in conjunction with the United States Bureau of Animal Industry, at Washington, whenever rabies appears in the state.
3. All licensed dogs compelled to wear collars and metal plates of special form, that they may be readily recognized.
4. Prompt capture of all dogs not properly tagged, with subsequent humane destruction, unless properly licensed within a short time.
5. Efficient muzzling of all dogs unrestrained in public places for a period of at least one year.
6. Dogs imported from countries other than those from which rabies is excluded to be quarantined for six months.

Moreover, the House of Delegates of the American Medical Association requests the management of its JOURNAL to use its columns to circulate much-needed information in regard to the diseased rabies.

On motion of Dr. H. Bert Ellis, California, this resolution was referred to the Reference Committee on Legislation and Political Action. (See opposite column.)

Dr. S. Solis-Cohen, Section on Pharmacology and Therapeutics, offered the following amendment:

Amend Section 1 and Section 2, Chapter 3, of the By-Laws, by adding in each after the words "approval by a majority vote of the section," the words "and confirmation by the House of Delegates."

S. SOLIS-COHEN,
HENRY L. ELSNER,
TREMONT W. FRANKHAUSER.

This amendment was referred to the Reference Committee on Amendments to the Constitution and By-Laws. (See below.)

Dr. A. R. Craig, Pennsylvania, moved that when the House adjourns, it adjourn to meet at 2 p. m., Thursday. Seconded.

Dr. J. W. Grosvenor, New York, moved to amend by substituting the words 2 o'clock Wednesday afternoon instead of Thursday afternoon. Seconded.

Dr. L. C. Morris, Alabama, moved, as an amendment to the amendment, that the House of Delegates adjourn to meet at 9 o'clock on Thursday morning.

This amendment was seconded and accepted by Drs. Grosvenor and Craig, and the original motion as amended was carried.

On motion the House then adjourned until 9 o'clock Thursday morning.

Fourth Meeting—Thursday, June 6

The House of Delegates met at 9 a. m., and was called to order by President Bryant.

The Secretary called the roll, and forty-eight members responded.

The minutes of the previous meeting were read, corrected and approved.

Report of Reference Committee on Amendments to the Constitution and By-laws.

Dr. Geo. W. Guthrie, Pennsylvania, presented a report from the Reference Committee on Amendments to the Constitution and By-Laws.

1. On the proposed amendment to Section 4, Chapter 10, Book 3 of the By-Laws, page 18, Judicial Council, (see page 2049), the committee is now ready to report, recommending the adoption of the amendment.

2. The committee also recommends the adoption of the amendments offered by Drs. Solis-Cohen, Elsner and Frankhauser. (See above.)

GEORGE W. GUTHRIE, Chairman.
R. C. CABOT,
C. E. CANTRELL.

On motion of Dr. Frank Billings, Illinois, the report was adopted.

Report of Reference Committee on Legislation and Political Action.

RESOLUTIONS ON RABIES ENDORSED.

Dr. Charles S. Bacon, Illinois, Chairman, presented the following report:

To this committee were referred the resolutions offered to the House of Delegates by Dr. R. C. Cabot, Massachusetts, with reference to rabies. (See opposite column.)

Your committee respectfully recommends acquiescence in the principles of the resolutions; that they be transmitted to the Committee on Medical Legislation, and that the following preambles and resolutions be adopted.

WHEREAS, The House of Delegates of the American Medical Association recognizes that by the enactment and enforcement of proper legislation, the distressing and fatal disease of rabies can be eradicated, as has been demonstrated in Great Britain, Germany and Sweden and other countries; and

WHEREAS, This Association is anxious that its influence and that of its members, individually, be earnestly directed toward the stamping out of this disease; therefore, be it

Resolved, That the House of Delegates of the American Medical Association requests its Legislative Committee to take the necessary steps to secure such national and state legislation as will attain this result, and would suggest:

1. That the general control of the disease in the United States be placed under the supervision of the chief of the Bureau of Animal Industry at Washington, as are other epizootic diseases, such as foot-and-mouth disease, according to the act of Congress of May 31, 1884.
2. That the control of the disease in the different states be vested in the State Cattle Commission or other properly appointed commission, to act in conjunction with the United States Bureau of Animal Industry at Washington, whenever rabies appears in any state.
3. That the general dissemination of the much-needed information in regard to this disease be delegated to the Board of Public Instruction of the American Medical Association.

THOS. MCDAVITT,
P. W. TOMLINSON,
HUBERT WORK,
J. H. HAMILTON,
C. S. BACON, Chairman.

On motion, duly seconded, the report of the committee was adopted.

Report of the Committee on Scientific Exhibit.

Dr. F. B. Wynn, Indiana, chairman, read the report of the Committee on Scientific Exhibit, as follows:

VALUE OF EXHIBIT.

The meeting place at this time prompts the observation that seven years ago, in this city, was inaugurated the first National Scientific Exhibit. The project, then viewed as a dubious experiment, has proven of great practical utility. The great Virchow, a short time before his death, wrote in a personal communication concerning the Scientific Exhibit, as follows: "I hope your countrymen will appreciate the intimate relationship of a practical knowledge of pathology to both diagnosis and treatment." And how forcefully true does this sage observation of the father of modern pathology appear in the light of progress made in both medicine and surgery. The surgeon has advanced because he has recognized the bacteriological factors underlying infection; and, further, because the knife has laid bare and made familiar to his eyes the character of the lesion which he seeks to remove. The general practitioner is not so fortunate. He more frequently deals with symptoms, the pathologic cause of which lies hidden from his view. The privilege of a postmortem is rarely granted to him. The Scientific Exhibit, therefore, supplies an educational need to the general practitioner. The committee which fails to reckon with this vast body of our membership neglects its greatest opportunity and obligation.

The Scientific Exhibit is no more the hand-maid of the Section on Pathology and Physiology, than it is the adjunct of medicine, surgery or ophthalmology. It belongs to the whole Association. It is an objective demonstration of the scientific and practical work accomplished in the various departments of the Association as well as representative of scientific medical progress the world over. At least, this is what the committee has sought to make it, and in the furtherance of the good work your continued sympathy and support are asked.

THE PRESENT EXHIBIT.

It is not designed at this time to speak in detail of the magnificent exhibit presented for your inspection. Suffice it to say, that in point of magnitude and artistic excellence it has not been surpassed, if equalled. What shall be said of the seventy or more exhibitors and demonstrators who have labored so unselfishly in the preparation and presentation of the exhibit? The computation of the service they have rendered would be difficult, and these words are indeed feeble to express my personal gratitude and the obligation due them from the whole Association in recognition of conspicuous service rendered.

CERTIFICATES RECOMMENDED.

It is suggested by the committee that perhaps a limited number of neatly engraved certificates of award might be given to the three laboratories or institutions presenting the best exhibits. To encourage original investigation, a gold medal might be offered for the best exhibit, illustrative of research work. It is especially recommended, for the ensuing year, that a gold medal be awarded to the best tuberculosis exhibit, which should be graded, especially on the following points:

1. Compactness and adaptability for continuous demonstration to the laity, as in public libraries, railway stations, etc.

2. Merit in lucidly and concisely instructing the laity on the disease, its nature, causation, prevention, cost, cure, etc.

The large tuberculosis exhibit presented in the leading cities of the country a couple of years ago was valuable in an educational way. It was, however, large, cumbersome, lacked classification and was expensive to maintain. A compact, comprehensive and yet inexpensive tuberculosis exhibit should be devised, which will serve as a model for use by health boards. This is but one of several sanitary problems, in which the committee believes the exhibit may render a valuable practical service and we hope it may receive your approbation.

FRANK B. WYNN, Director Scientific Exhibit.

After reading the report, Dr. Wynn suggested that provision should be made for securing the certificates of award (mentioned in the report) and medals outside of the customary appropriation. The House should designate a Committee on Awards rather than leave it to the Committee on Scientific Exhibit, because some of the competitors are likely to be exhibitors, and it would be a source of embarrassment to many of the exhibitors.

REPORT REFERRED TO BOARD OF TRUSTEES.

On motion of Dr. Philip Mills Jones, California, the remarks of Dr. Wynn were referred to the Board of Trustees with the request that they be acted on favorably.

It was then moved that the report be adopted. Seconded.

Dr. Frank Billings, Illinois, moved to amend that the report be adopted with the recommendations of the committee.

The amendment was seconded, accepted, and the motion as amended was carried.

Reference Committee on Reports of Officers.

Dr. Philip Mills Jones, California, read the report of the Reference Committee on Reports of Officers.

I. PRESIDENT'S ADDRESS. (See page 1957.)

(*a*) *Medical Education.*

We endorse opposition to the course of certain physicians in organizing or conducting incompetent medical schools, and we believe that the moral weight of this Association, together with the publicity which will eventually follow the work of the Council on Medical Education, will secure the proper uplifting of medical education in the United States. The honest activity of the various boards of examiners, cooperating with the Council, will be of inestimable value in securing this result.

(*b*) *Council on Pharmacy and Chemistry.*

We most earnestly commend the work of the Council on Pharmacy and Chemistry and the President's views thereon, and we commend to the Board of Trustees the further and permanent continuance of this work. We most strongly recommend that the members of this Association confine their prescriptions to articles contained in the United States Pharmacopeia, the National Formulary, or such as have been approved by the Council on Pharmacy and Chemistry.

(*c*) *Fees for Life Insurance.*

We endorse the report of the Insurance Committee and believe that a minimum fee of five dollars for life insurance examinations is just and fair, and we deprecate the organized effort of certain companies to compel the acceptance of a lesser fee. While it would seem desirable for county societies to take cognizance of this matter, we further deprecate the exercise of any harsh or coercive measures directed against individual members. We also agree with the view that present differences will eventually be amicably adjusted. We concur in the recommendation that the committee be discharged.

(*d*) *Reference Committees.*

We endorse the recommendation referring to committees, and recommend that the various reference committees be appointed two months in advance of the annual meeting, and that the reports be referred to these committees early enough for consideration.

II. REPORT OF GENERAL SECRETARY. (See page 1957.)

We sincerely commend and heartily approve, the work of the General Secretary as set forth in his report, and we believe that the growth of the Association and the development of THE JOURNAL and its plant are largely, if not entirely, due to his indefatigable efforts.

III. REPORT OF THE BOARD OF TRUSTEES. (See page 1959.)

Any organization or corporation transacting business can only be successful so long as its affairs are conducted in a careful and up-to-date business-like manner, and it is with pleasure that we note the essentially thorough and business-like manner in which the Trustees have conducted the affairs of this Association. We believe that the statement of audit is sufficiently definite and comprehensive, and that to make public further and more intimate business details would be unwise and poor business policy. We consider the publication of the American Medical Directory, the compilation of data relative thereto, and of the graduation and licensure of physicians in the United States, undertakings of the greatest value to the Association and to the entire medical profession; and we consider the financial status of this portion of the Association work to be eminently satisfactory.

IV. REPORT ON ORGANIZATION. (See page 2043.)

We recommend that Dr. J. N. McCormack be requested by the Trustees to continue his most valuable work with the profession, and the laity, in this country.

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(a) In the matter of the proposed postgraduate work, we recommend that the Trustees appropriate six hundred dollars for this purpose.

(b) We consider that active work in county societies is of the greatest value to the medical profession of this country, and we earnestly recommend that every effort be made to stimulate interest and activity in county society work.

In the matter of the proposed branch associations, we recommend that this report on branch associations be referred to the state associations by the General Secretary, with an urgent request for an expression of their views, to be presented to this Association at the next annual meeting.

We offer the following:

WHEREAS, The Council on Pharmacy and Chemistry, after examing many hundreds of preparations, has officially announced its approval of a large number of such preparations; and

WHEREAS, We believe that the editors of many medical journals in this country, both official organs of State Associations and privately owned journals, are desirous of cooperating in the work of freeing the medical profession from the nostrum control; therefore, be it

Resolved, That this Association most earnestly requests all medical journals to refuse to aid in promoting the sale of preparations which have not been approved by the Council, by refusing advertising space to such preparations; and be it further

Resolved, That we most earnestly request the moral and financial support of our members for those medical journals, whether privately owned or controlled by medical organizations which disregard commercialism and stand firm for honesty and right dealing, thus sustaining the Council in its greatest work for the medical profession.

In conclusion, your committee believes that all of the officers of this Association have served it well and faithfully, and we, therefore, move the adoption of the following:

Resolved, That the thanks of the Association be extended to the President, the General Secretary, the Board of Trustees and other officers for their valuable and efficient services.

W. T. SARLES,
PHILIP MILLS JONES,
W. W. RICHMOND,
DONALD CAMPBELL,
A. JACOBI, Chairman.

After the reading of the report, the President said: The Chair will decide how this report shall be considered. First, a motion to adopt the report should be made, which should be seconded, after which the report may be taken up seriatim, the preamble coming last for acceptance and action.

Dr. C. E. Cantrell, Texas, moved that the report be adopted. Seconded by Dr. O. B. Campbell, Missouri.

DISCUSSION ON THE PRESIDENT'S REPORT.

Section 1, including subsections *a*, *b*, *c* and *d*, was then read, after which it was moved to amend subsection *d* to read that reports of committees be in the hands of the reference committees at least thirty days before the annual meeting.

Seconded.

Dr. Wisner R. Townsend, New York, said there was a little ambiguity in the sentence "early enough for consideration," and he thought a definite time before the meeting should be stated. He moved to amend that these reports be sent to each member of the House of Delegates at least two weeks before the annual meeting.

This amendment was seconded and accepted.

Dr. C. E. Cantrell, Texas, suggested that the appointment of the committee be left until the President knows what members will be present.

Dr. W. S. Hall, Section on Pathology and Physiology, moved, as a substitute motion, that at least two weeks before the annual meeting of the Association, printed reports of committees be sent to every member of the House of Delegates, and that reference committees be appointed on the first day of the session.

Seconded.

After discussion by Drs. Wisner R. Townsend, Frank Billings, W. H. Carmalt, George H. Simmons and W. H. Sanders, the substitute motion of Dr. Hall was put and carried.

Dr. Jones then read Section 2 of the report, which, on motion, was adopted.

DISCUSSION ON THE REPORT OF THE BOARD OF TRUSTEES.

Section 3 of the report was read, after which Dr. George W. Webster, Illinois, moved its adoption. Seconded.

DR. H. W. COE, Oregon:—You will notice, gentlemen, that this report of the Board of Trustees has been audited by the Investors Audit Company, E. M. Mills, manager, and that it is favorable to the Association. It takes up the question of something like one-third of a million dollars, a vast sum of money collected from the profession of this country, from the East and West, from the North and South—the money of men who each pay $5.00, which goes into the treasury of this Association along with other expenses. It is a considerable drain on both the young and older members of the profession when we consider the other expenses they have to meet, and it seems to me we ought to take up this matter of finance as a business man would discuss his own financial affairs, for the reason that we are here as representatives of the profession of our states. We are sent to this House of Delegates as picked men, not simply to register. There are certain things on the face of this report which show that this Auditing Company is selected by the Board of Trustees to audit the accounts of the Association. This Auditing Company or committee is not selected by this House of Delegates, but is picked by the Board of Trustees. It seems to me that an auditing committee should be selected by this House to go over the finances of the Association, and not by the Board of Trustees. Let us take up a few of the items given in the report.

Under Exhibit A of the report of the Board of Trustees, we have what is termed a comparative balance sheet of assets. They have included in the assets net investment in directory to date (Exhibit D), amounting to $43,820.66. Under net investments in this directory, they include such items as these: Express. I cannot see why money sent for express is a net asset. They have here under Exhibit D, page 4 of the report, an item designated as postage, amounting to $4,254.13. I do not see that money spent for postage can be considered an asset. Again, here is a pay-roll amounting to $23,674.96 as an asset. These items are not clear to me.

Under Exhibit E, they have an inventory of paper, stock, metal, type, buttons, ink and coal, amounting to $14,336.59, which, of course, are assets, according to the Board of Trustees. I contend that these are not assets, and that this exhibit is not made to show the real condition of affairs, but is intentionally misleading, and—

THE PRESIDENT:—Men's names and men's motives are not debatable; but the acts of men and the consequences of their acts are debatable.

DR. COE (resuming):—Perhaps this is misinformation on the part of the members of the Board of Trustees, and that these items are in the wrong place. But there are some assets in this directory item that are not explicit enough. According to this report, the total expenditure for the directory paid to January 1, 1907, was $47,441.83. Of this amount, $6,035.50 was paid for the Standard Directory. The amount expended on the directory for other purposes since July 1, 1905, is, therefore, $41,406.33

The report says, "To offset the charge of $41,406.33, there are at present the following assets: (1) 7,300 advance orders for the directory, which, at $5.00 each, gives a total of $36,500." They do not include this in their report because it is one thing to have an order for money and another to get the money. Secondly, we are told that 8,500 copies of the directory were printed, and there are on hand 1,200 extra copies. It is evident from the way this directory item has been presented, that we should take notice. It seems to me, we have a duty to perform to the constituencies we represent, and the finances of this Association should be gone over carefully by a committee appointed by this House of Delegates of independent men.

Looking under Exhibit H on page 5 of the report, I see certain items, some of which are not clear. Here is the salary of Dr. McCormack for the year 1906, amounting to $4,999.92; agents' expenses, $551.08. I do not know what the latter item means. Here is another suggestive item under the head of jobbing, amounting to $246.85, and so on all the way through the report. It would seem to me as though the Board of Trustees is entitled to a different clearance than it gets in this report, and if things are all right, then it should have that clearance.

DR. J. W. GROSVENOR, New York:—I would like the privilege of asking the Board of Trustees a few questions.

Under Exhibit A, page 2, we have liabilities and sundries. I would like to know what these sundries are. I do not know what they mean. On another page, 3, under Exhibit B, I find a large item under jobbing. I do not understand what that is, whether it is for work that has been done at the headquarters of the A. M. A. or some outside companies. Then I notice books. What books are those? I notice, too, sale of paper boxes, etc. Why should the Board of Trustees sell paper boxes? Then on the same page, we find an

item under commissions for securing new members, etc. How much are these commissions? I see under Exhibit C on the same page of the report, inventories, increase in assets. I do not understand that. Then it says below, a decrease in assets. Is that a decrease from the report of last year or not? And on page 4, Exhibit D, I see correspondents, information, etc., an item amounting to $7,983.81.

Then, with regard to the payroll of the Association. What is the average pay of these employés, or what is the highest or lowest amount any employé receives? Then on page 5, regarding salaries, what salaries are those? I would like to get a little more information about the payroll and also about jobbing.

DR. M. L. HARRIS:—On behalf of the Board of Trustees, I would like to make an explanation of these items, provided the House of Delegates desires it.

DR. C. E. CANTRELL, Texas:—I move that we hear Dr. Harris, and that his time be not limited.

Seconded and carried.

DR. HARRIS (resuming):—First, in reference to the audit. We select an auditing firm which has no connection whatever with the Association. It is a reliable auditing firm. This company audits accounts for such large firms as Alexander H. Revell & Co., Chicago; the American Trust and Savings Bank, the Colonial Trust Company, Peabody, Houghteling & Co., the Santa Fe Railroad Company, the Northern Pacific Railroad Company, etc. The representatives of this firm come to your building at Chicago and audit every account. Everything that is bought is traced from the time it is sent for until it is received in the office and checked up, and every cent that is paid out is checked up, as well as every cent that is put in the bank and every cent that is taken out of the bank. This auditing company makes to us a complete report of the entire financial condition of the Association. The gentleman has no business ability or he would not ask such simple questions about these—

THE PRESIDENT:—Be careful, Doctor, what you say; be careful; you are reaching a dangerous point.

DR. HARRIS (resuming):—Everything that is paid out to accomplish an end is an asset until the other side of the ledger is complete to offset it. Every dollar put in the directory is an asset until it goes out again, and is on the opposite side of the ledger balance. This report was made before the income from the directory had been received. The report was made up to the end of December, 1906. The income from the directory is not all received yet from the copies that have been sold. Every dollar of the directory is an asset until the edition has been completed.

With regard to jobbing and agents we send out to aid in organization, I will say that under the summary of organization we have mentioned the account of Dr. McCormack, who is at the head of that department. We have other agents who are sent out to aid in this work. Jobbing is printing items of stationery, etc., and the little pamphlets which we send out to aid in organization. This printing is done for organization purposes. Under Exhibit A, liabilities, page 2, there are innumerable kinds of small accounts, and we can furnish an itemized list of all of these accounts to the members of the House of Delegates if necessary. Under this head are embraced reprints and things of that kind that are printed in the office, and which are not included in the publication of THE JOURNAL itself. They are things for which the Association is paid.

As to the sale of scrap paper and boxes, we have an enormous amount of scrap paper which comes from the cutting machines. This paper accumulates and then we sell it. The boxes referred to are the large wooden cases in which the paper for THE JOURNAL is delivered. These are also sold.

DR. J. W. GROSVENOR:—I understand that there is a clerk at the office who receives money and pays out money without special supervision. Is that true?

DR. M. L. HARRIS:—It is not true. Every dollar that is received or paid out is under the supervision of the General Manager.

DR. H. W. COE:—Is it not true that the great bulk of receipts never gets into the treasury?

DR. M. L. HARRIS:—These receipts go into the treasury, but not into the treasurer's hands.

DR. H. W. COE:—I do not find this in the receipts of the treasurer.

DR. M. L. HARRIS:—The receipts do not go into the treasurer's hands. Dr. Billings, our Treasurer, is simply a custodian, and you all know that it is absolutely impossible for Dr. Billings to devote his entire time to the receipt of every dollar that comes into the office of THE JOURNAL. In the next place, the money does not go into his hands, but to the general office. The surplus money goes to the Treasurer and he is custodian for our surplus funds. We have a clerk in the office who devotes his entire time to that phase of the work. All money comes to the General Manager's office. He is bonded for $10,000. Every man who handles money for the Association is under bond.

A MEMBER:—It may be there are a number of gentlemen present who do not understand the principles of common commercial law, and, if so, I would urge them to read up and not prolong this discussion indefinitely.

THE PRESIDENT:—I have heard insinuations cast on the officers of the Association for many years—men who are trying to discharge their duties faithfully and honestly, and I determined that if I ever occupied this position I would see it threshed out to the satisfaction of every member in the House of Delegates. (Applause.)

A MEMBER:—It seems clear that the matter before this House of Delegates, and one which is the cause of all disturbance, is whether the Board of Trustees shall make its report in greater detail or not, or whether there should be a detailed report printed and sent to every member of the House of Delegates for his investigation. If the members of the Board were asked to explain or to answer every question we ask, it would take them a week to do so. Is it the sense of this House that we be satisfied with the Auditor's report such as we have, or shall we require in printed form every detail of 10 or 15 cents that is charged to expense accounts that goes through the hands of the Association? It seems to me that we ought to vote as to whether or not we are satisfied with the Auditor's report and stop all of this discussion at once.

DR. C. E. CANTRELL, Texas:—Is it not a fact that the members of the Board of Trustees are our agents and are doing business for us; that the officers of the Association, the Secretary and JOURNAL people are employed by the Board of Trustees, and that this Auditing Committee acts for the Board of Trustees to see whether or not these people have done and are doing their work properly and have accounted for everything, and whether or not this report is not a summing up of the whole matter?

DR. M. L. HARRIS:—Yes. An unbiased auditing company is absolutely essential to the conduct of every business, and we are endeavoring to conduct the business of the Association in a business-like manner, so that every single item can be accounted for.

DR. PHILIP MILLS JONES, California:—One word of explanation from the committee. The committee considered carefully the question of the details of this report, which has been raised in the present discussion, and we not only considered it a waste of time and of energy to embrace many of these details, but we further considered it unwise, and so expressed it in our report.

DR. CHARLES J. KIPP, New Jersey:—I think the gentleman from Oregon (Dr. Coe) should withdraw his remark that the report was "intentionally misleading."

DR. H. W. COE:—I will gladly withdraw any offensive statement I may have made, but I do not think I used the words "intentionally misleading." I wish to put myself on record, however, as saying that the report is not as explicit in regard to certain details as I think it ought to be.

The motion to adopt this section of the report was then put and carried.

THE PRESIDENT:—I promised our Secretary that he should make some brief remarks on what has been said, but in my desire to expedite the business of the House I overlooked it, and I will ask the indulgence of the House for a brief time to listen to such remarks as the Secretary may desire to make.

DR. H. W. COE:—I move that Secretary Simmons be permited to make extended remarks.

Seconded and carried.

DR. GEORGE H. SIMMONS, Illinois:—During the last two years I have been accused of everything in the category from being a grafter to a swindler and everything else. Dr. Billings has been grouped with me. Members of the Board of Trustees have been grouped with me. There have been insinuations cast that are not pleasant. The fact of the matter is that this Auditing Committee audits my accounts and reports to the Board of Trustees. I am the one who is investigated, and the methods we have adopted are the ones I have either originated myself or are those of my predecessors, and we have tried our best to have these methods as absolutely business-like and as safe in every respect as possible.

We have a peculiar difficulty to contend with from the fact that we get a great proportion of the money in small sums. We have gone to different firms in Chicago and have asked

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different auditing companies what method to adopt to transact our business in a business-like way. We have adopted this method: We have a clerk who is under bond. She opens every letter and enters in a cash record every cent that comes in. Items relating to membership, subscription, directory, advertising, etc., are properly entered on our books in the different departments to which they belong. For instance, every item that comes in credited to subscriptions goes to the subscription department. Every item for membership goes to the membership department. These accounts are reported back to the cashier every night, and the reports must agree in every detail with the total amount entered on the books. Every one of these items is entered twice, in some instances three times. Everybody who handles money, directly or indirectly, is under bond. I am under bond. Mr. Braun, the Business Manager, and Mr. Shelly, the Cashier, are under bond. The latter, who is directly responsible for the cash and a most faithful and honest man, feels these insinuations as much as any of us. We have tried our best to carry on the business of the Association in a strictly business-like manner.

In regard to the Treasurer's fund, I do not think Dr. Harris answered that question, although I believe it was asked. Let me say that the money which comes into the office goes into the bank, and we are checking out of that fund every day. After we get a certain surplus it is transferred to the Treasurer, who deposits it in a separate bank as a surplus fund. Every cent of money that goes into the Treasurer's hands draws either 2 or 3 per cent. interest. For several years past we have also been drawing 2 per cent. on the average amount of our checking account on deposit in the Commercial National Bank of Chicago. There is not an item paid out at the office of THE JOURNAL that is not represented by a receipt, even if it is a nickel for the boy to pay his street car fare. We have a voucher check system that is as perfect as we can possibly make it, and any of you gentlemen can go into the voucher room and see all the voucher checks that have been paid since we have adopted that system. You can go there and see every cent that is paid to me, to Mr. Braun, or to any one who is paid by check. Now, if there is any way by which we can conduct the business of the Association in a more systematic or business-like manner, then I would like to have some one tell me how.

DR. L. S. MCMURTRY, Kentucky:—I move that the House of Delegates tender a vote of confidence and thanks to the Secretary-Editor and Manager for his faithful, honest and efficient services.

This motion was seconded by several, but Dr. Coe said that, inasmuch as he had started this discussion, but had said nothing against the Editor and was very careful not to do so, he took great pleasure in seconding the motion.

Dr. Hubert Work, Colorado, moved to amend that the Board of Trustees be included in the vote.

The amendment was seconded, accepted and the original motion as amended was unanimously carried.

Report on Organization.

Referred to the Board of Trustees.

Dr. Jones then read Section 5 of the report relating to organization.

Dr. Adam Guthrie, Arkansas, moved the adoption of this section, which was seconded by Dr. Cantrell.

Dr. Wisner R. Townsend, New York, said that, inasmuch as this involved the expenditure of money, he would move as a substitute that the question of the abolition or retention of an organizer be referred to the Trustees with power to act, and that the remainder of the section be adopted.

The substitute was seconded.

Dr. Jones stated that the substitute was practically embodied in the recommendation of the committee.

Dr. Townsend replied that if a substitute motion meant the same as the original, why not adopt the substitute?

The Chair ruled that the substitute and the original in this case meant the same.

The motion of Dr. Guthrie was then put and carried.

Branch Associations.

The section in reference to forming branch associations was read by Dr. Jones, who said that at the time the committee unanimously adopted this section it considered that the initiative in regard to forming branches should come from the state associations involved. The committee had no knowledge that any such application had been presented. Last night Dr. McCormack had handed him a telegram signed by Dr. F. H. Clark, Oklahoma, stating, "Do not forget to ask House of Delegates to make Medical Association Southwest official district association."

Dr. Jones said the committee had no knowledge of the states embraced in this Association.

On motion, this part of the report was adopted.

The remaining sections of the report of the committee were read and adopted. The preamble was likewise adopted.

Report of Committee on Reports of Officers Adopted.

On motion, the report was then adopted as a whole.

Dr. J. W. Grosvenor, New York, moved that the Board of Trustees be requested by the House of Delegates to make its report for the coming year more explicit than formerly by the introduction of explanatory notes or words.

This motion was not seconded. The President stated that, as there was no objection, the request would doubtless be complied with.

Report of Reference Committee on Medical Education.

Dr. F. B. Lund, Section on Surgery and Anatomy, presented the following report of the Reference Committee on Medical Education:

The Reference Committee on Medical Education of the American Medical Association, to which was referred the report of the Council on Medical Education, (See page 1701) reports as follows:

The Council on Medical Education was created by the American Medical Association to act as its agent in an effort to elevate the standards of medical education. The Council's functions are two: To make an annual report on existing conditions in medical schools in the United States, and to make suggestions which shall lead to a gradual improvement in medical education.

I.

The first of these functions has been well performed, as is evidenced by the Council's present report. The reference committee is of the opinion that the compilation of the tables based upon the standings before state licensing boards of the graduates of each medical school in the United States should be specifically endorsed, and that such an annual compilation shall be indefinitely continued. The reference committee is further of the opinion that the most valuable portion of the Council's report is that based on personal inspection of all the medical schools of the United States. The committee, therefore, suggests that the House of Delegates of the American Medical Association direct the Council on Medical Education to make an annual inspection of all of the medical schools of the United States for a period of three years to date from June 1, 1907.

II.

The second of its functions, namely, the making of suggestions which shall lead to a gradual improvement in medical education, the Council on Medical Education has also fearlessly performed. The suggestions found in the report by your Reference Committee have been considered by its members, and the following have been singled out to be presented to the House of Delegates as the educational policy of the American Medical Association.

(1) The minimum educational standard for a medical school in good standing with the American Medical Association shall be:

(a) Evidence of a preliminary education sufficient to enable a student to enter the freshman class of a recognized university or college, this education being construed to mean either graduation from a four-year high school or an amount of training equal to that given in a four-year high school course.

(b) Four years of successful work in a medical school, each year to consist of at least thirty weeks of thirty hours per week of actual work in class, laboratory, dispensary and hospital.

(2) Although the American Medical Association continues to stand by the four-year high school course adopted at the Portland session as the *minimum* preliminary educational qualification for the study of medicine for the entire United States, at the same time this Association favors beyond present requirements, as soon as conditions warrant, the enlargement of preliminary scientific education to include a thorough course in physics, chemistry and biology, and also one modern language, preferably German.

(3) Medical schools conducted solely for profit shall not be in good standing with the American Medical Association.

(4) Night schools, meaning those schools giving all or the major portion of their instructions after 4 p. m. and before 10 p. m., shall not be in good standing with the American Medical Association.

III.

The American Medical Association, through its House of Delegates, urges, both at the suggestion of its Council on Medical Education and of its Reference Committee on Education, the following:

(1) That state licensing boards be urged to make annual personal inspections of the medical schools located in their respective states.

(2) That state licensing boards be urged to award to no undergraduate a license to practice medicine.

(3) That the state licensing board of each state be urged to pass on the preliminary educational attainments of all those contemplating the study of medicine in that state, and to issue to each successful candidate a certificate entitling him to admission into any school located in that state choosing to receive that candidate.

(4) That the state licensing boards be urged to extend so far as possible the principle of reciprocity among themselves, the American Medical Association being heartily in favor of the rapid extension of the reciprocity principle.

IV.

The Reference Committee further recommends to the House of Delegates of the American Medical Association that the plan of annual conferences on medical education adopted by the Council on Medical Education be endorsed, and that conferences similar to those hitherto held be annually conducted under the auspices of the American Medical Association, each state licensing board, and each state medical society being most cordially invited to appoint at least one delegate for such annual conferences, the conference further to have as members such others as it shall seem to the Council on Medical Education advisable or necessary to invite.

The reference committee desires further to state that it is of the opinion that the Council on Medical Education can not be too highly complimented for the work which they have accomplished during the past year. Indeed, the Reference Committee is of the opinion that a very hearty vote of thanks should be given that Council for its effective work, and that the Council on Education should feel that it has the hearty cooperation of the entire medical profession as represented by the American Medical Association.

CHARLES LOUIS MIX,
STUART MCGUIRE,
HENRY L. ELSNER,
SOLOMON SOLIS-COHEN,
F. B. LUND, Chairman.

REPORT ADOPTED.

Dr. L. C. Morris, Alabama, moved the adoption of the report. Seconded and carried.

The Southern Medical Association.

DR. F. W. MCRAE, Georgia:—In pursuance of the suggestion of the House of Delegates, there has been organized the Southern Medical Association. Dr. Martin of Savannah, Ga., president of that association, is here, and I would move that he be given five minutes in order to speak of this association.

Seconded and carried.

DR. HENRY H. MARTIN:—We have gone to work in the South and have organized the Southern Medical Association. We have brought the matter before the different state societies, so that this association now includes Georgia, Florida, Alabama, Mississippi, Tennessee and Louisiana, and it has already been acted on and endorsed, so that there now exists a Southern Medical Association. I would most respectfully request that the House of Delegates at this meeting recognize this association as a district branch of the American Medical Association. The association we have organized is a purely scientific body, having no legislative functions.

(No action was taken.)

Dr. John T. Wilson, Texas, called attention to the existence of the Southwestern Medical Association.

Resolutions in Favor of Enlarging the High School Courses in the South Adopted.

Dr. Charles L. Mix, Illinois, offered the following resolution:

WHEREAS, In many of the southern states but few high schools exist, having a course extending beyond three years; and

WHEREAS, It is therefore a hardship for some of the southern medical schools to adopt a four-year high school course, or its equivalent, as a minimum of preliminary education for the study of medicine; therefore, be it

Resolved, That the American Medical Association lend its influence to the physicians of the southern states in their endeavor to secure an enlargement of the high school course from a three-year to a four-year course, and that the Council on Medical Education is hereby instructed to conduct active propaganda in the South with the above end in view.

Dr. L. C. Morris, Alabama, moved the adoption of the resolution, which motion was seconded and carried.

Report of Reference Committee on Hygiene and Public Health.

The Reference Committee on Hygiene and Public Health then reported as follows:

RESOLUTION ON VENEREAL DISEASES REFERRED BACK TO SECTION.

The committee begs to submit the following report on the resolution on making venereal disease reportable.

It is recommended that this resolution be referred to the Section on Hygiene and Sanitary Science for a more detailed statement as to what is meant by the expression, "control of Boards of Health."

The resolution above referred to was offered by Dr. L. Duncan Bulkley, New York, last year. It reads:

Resolved, That in the opinion of the Section on Hygiene and Sanitary Science of the American Medical Association, gonorrhea, chancroid and syphilis, should be included among diseases to be under the control of boards of health of the different states.

On motion of Dr. J. W. Grosvenor, New York, the recommendation of the committee was concurred in.

RESOLUTION OF CONTINENCE APPROVED BY COMMITTEE.

The Reference Committee on Hygiene and Public Health also submits this report on the resolution of Dr. Prince A. Morrow, a copy of which is given below, that in its opinion this resolution should be approved by the House of Delegates.

WHEREAS, There exists among the laity a general impression that sexual intercourse is necessary to the health of men; and

WHEREAS, It is claimed that the impression rests on the authority of the medical profession; now, therefore, be it

Resolved, That in the opinion of the Section on Hygiene and Sanitary Science of the American Medical Association, continence is not injurious to health, and that this Section reprobates the contrary doctrine as a menace to the physical and moral welfare of the individual and society.

REPORT OF COMMITTEE AND RESOLUTION LAID ON THE TABLE.

On motion the report of the committee on this resolution and the resolution itself were laid on the table.

EDUCATION ON VENEREAL DISEASE.

The Reference Committee on Hygiene and Public Health submitted the following on the resolution on education concerning venereal disease offered by Dr. Liston H. Montgomery, Chicago, last year. This resolution reads:

Resolved, That it is the opinion of the Section on Hygiene and Sanitary Science of the American Medical Association that it should be the duty of state boards of health to disseminate literature to educate the people on the subject of the great black plague (venereal disease), as they do regarding tuberculosis and other infectious diseases.

The committee recommends that the words, "through proper channels," be inserted after the word "literature."

With this amendment, the committee recommends the resolution for favorable consideration by the House.

On motion of Dr. Frank Billings, Illinois, the recommendation of the committee and the resolution were adopted.

RESOLUTION REGARDING MEDICAL LIBRARIES REFERRED TO BOARD OF TRUSTEES.

Dr. Reuben Peterson, Michigan, offered the following preambles and resolution:

WHEREAS, The Association of Medical Librarians has been in existence for ten years and has, in its membership, some sixty-five medical libraries, including all the large medical libraries; and

WHEREAS, These libraries are all equipped with proper rooms, have regular hours for reading medical books and periodicals; and

WHEREAS, Many of the libraries are in public libraries, and all accessible to intelligent lay readers as well as physicians; and

WHEREAS, These libraries can and do serve a valuable purpose in the dissemination of knowledge of medicine and sanitary science; and

WHEREAS, THE JOURNAL of the American Medical Association is and should be the most important medium of communication in all such matters, and as such should be as accessible as possible; therefore, be it

Resolved, That THE JOURNAL of this Association be sent free to all medical libraries, the names of which shall be submitted to the Secretary by the Medical Library Association.

On motion of Dr. C. E. Cantrell, Texas, the resolution was referred to the Board of Trustees.

Professor Carl Hess Elected an Honorary Member.

Dr. S. D. Risley, representing the Section on Ophthalmology, said that he was instructed by his Section to nominate Professor Carl Hess, of Würzburg, Germany, for honorary membership, and, on motion of Dr. C. E. Cantrell, Texas, Professor Hess was elected to honorary membership.

Anesthesia Commission Recommended.

REFERRED TO THE REFERENCE COMMITTEE ON SECTIONS AND SECTION WORK.

Dr. F. B. Lund, Section on Surgery and Anatomy, presented the following from his Section:

In the Section on Surgery and Anatomy, it was moved, seconded and carried that the Chairman of the Section be empowered to appoint a committee of five (with power to appoint subcommittees) to be known as the Anesthetic Commission of the Section on Surgery and Anatomy of the American Medical Association; the duties of this commission, to serve for five years, shall be to gather and analyze data regarding anesthetics and report annually to the section.

Further, the delegate of the Section is asked to request an appropriation from this House of Delegates for the necessary expenses (postage, stationery, etc.) of the committee.

On motion of Dr. C. S. Bacon, Illinois, the resolution was referred to the Reference Committee on Sections and Section Work, to report at the afternoon meeting. (See page 2062.)

Southern Medical Association.

REFERRED TO REFERENCE COMMITTEE ON REPORTS OF OFFICERS.

Dr. F. W. McRae, Georgia, presented a formal application of the Southern Medical Association, and moved that it be referred to the Reference Committee on Reports of Officers, with the request that the committee report on this and other pending applications at the afternoon meeting.

Seconded and carried.

Delegates to the International Association of Stomatology.

Dr. G. V. I. Brown, Section on Stomatology, said the following men have been elected delegates from the Section on Stomatology to the International Association of Stomatology, to be held in Paris, Aug. 1, 1907: Drs. E. A. Bogue, New York; G. V. I. Brown, Milwaukee; Charles O. Kimball, New York; M. L. Rhein, New York, and Eugene S. Talbot, Chicago.

Dr. Philip Mills Jones, California, moved that the election of these gentlemen be confirmed by the House of Delegates.

Seconded and carried.

Section Programs.

The following resolution was offered from the Section on Cutaneous Medicine and Surgery:

Resolved That our representative to the House of Delegates be instructed to request that the proper authorities be directed to mail copies of the complete sectional program of this Section to each member, who has registered at this meeting, from three to five days before the annual date of the next meeting.

On motion, the resolution was referred to the Committee on Sections and Section Work. (See page 2062.)

A MEMBER:—I wish to know whether this House of Delegates, through its Commitee on Organization, is empowered to district the country, or whether this is left to the states.

On motion, this matter was referred back to the Committee on Organization, to be reported on at the afternoon meeting. (See page 2062.)

The Secretary read resolutions presented by Dr. F. A. Long, president of the Nebraska State Medical Society, in regard to the giving of commissions, which were referred to the Judiciary Council.

Resolution on Pharmacopeia Revision.

The Secretary read the following resolution from the Section on Pharmacology and Therapeutics:

The following resolutions were adopted by the Section on Pharmacology and Therapeutics, and referred to the House of Delegates:

Resolution on Pharmacopeial Revision.

To provide for these improvements in the next Pharmacopoeia and to give every part of this country equally full scientific and practical representation at the next Pharmacopeial Convention, we offer the following resolutions:

Resolved, That the Section of Pharmacology and Therapeutics requests the House of Delegates to establish a Committee on the Pharmacopeia, this committee to consist of six members of the American Medical Association nominated by the Section on Pharmacology and Therapeutics and elected by the House of Delegates. The object of this committee to be the collection of suggestions on desirable changes in the Pharmacopeia and the formation of subcommittees in all chartered medical societies of the country, these subcommittees to send instructed delegates subject to the rules of the Pharmacopeial Convention of 1910; and be it further

Resolved, That the Section on Pharmacology and Therapeutics nominate at the present session twelve men, of whom the House of Delegates shall elect two to serve for three years, two for two years, and two for one year, and thereafter each year this Section shall nominate four men, two of whom shall be elected by the House of Delegates to serve for three years on the above committee. This committee on the Pharmacopeia to be appointed by the House of Delegates. Be it also

Resolved, That the Section of Pharmacology and Therapeutics requests the House of Delegates to appropriate the sum of one hundred dollars annually for the necessary printing and postage expenses of this committee.

OLIVER T. OSBORNE,
WILLIAM J. ROBINSON,
H. EDWIN LEWIS.

On motion of Dr. G. Lane Taneyhill, Maryland, the resolutions were referred to the Board of Trustees. (See page 2065.)

Davis Memorial.

DR. HENRY O. MARCY, Boston:—The Davis Memorial Committee made its report yesterday morning regarding certain sums of money that have been paid up to this meeting, and I have been requested to ask the House of Delegates that $5,000 be appropriated by the American Medical Association for this special purpose. The committee believes that it can raise $15,000 from the different states.

On motion, Dr. Marcy's request was referred to the Board of Trustees. (See page 2064.)

On motion, the House of Delegates then adjourned until 2 p. m.

Fifth Meeting—Thursday, June 6

The House of Delegates reconvened at 2 p. m. and was called to order by the President.

The Secretary called the roll and 81 members responded.

Election of Officers.

After the roll-call, the election of officers was in order.

The President appointed as tellers Drs. Wisner R. Townsend, New York; S. Bailey, Iowa; George W. Webster and Robert T. Gillmore, Illinois.

The following officers were nominated, balloted for and duly elected:

President—Dr. Herbert L. Burrell, Boston.

First Vice President—Dr. Edwin Walker, Evansville, Indiana.

Second Vice President—Dr. Hiram R. Burton, Lewes, Delaware.

Third Vice President—Dr. George W. Crile, Cleveland, Ohio.

Fourth Vice President—Dr. W. Blair Stewart, Atlantic City, New Jersey.

General Secretary—Dr. George H. Simmons, Chicago.

Treasurer—Dr. Frank Billings, Chicago.

Trustees—Dr. T. J. Happel, Trenton, Tenn., re-elected; (1907-1910); Dr. W. W. Grant, Denver, re-elected (1907-1910); Dr. Philip Marvel, Atlantic City, N. J., re-elected (1907-1910).

The other members of the Board are,: Dr E. E. Montgomery, Philadelphia, Pa., 1908; Dr. A. L. Wright, Carroll, Ia., 1908; Dr. H. L. E. Johnson, Washington, D. C. 1908; Dr. M. L. Harris, Chicago, Ill., 1909; Dr. Wm. H. Welch, Baltimore, Md., 1909; Dr Miles F. Porter, Ft. Wayne, Ind., 1909.

Standing Committees Appointed.

The following nominations were made by the President and confirmed by the House of Delegates:

Committee on Medical Legislation: In place of Dr. W. L. Rodman, Dr. C. S. Bacon, Illinois.

The other members of the committee are: C. A. L. Reed, Cincinnati, O., Chairman, 1909; Wm. H. Welch, Baltimore, Md., 1908.

Council on Medical Education: In place of Dr. Charles H. Frazier, Dr. James W. Holland, Pennsylvania.

The other members of the Council are: Arthur Dean Bevan, Chicago, Ill., Chairman, 1909; W. T. Councilman, Boston, Mass., 1910; J. A. Witherspoon, Nashville, Tenn., 1911; Victor C. Vaughan, Ann Arbor, Mich., 1908.

Committee on Transportation and Place of Session: Dr. M. L. Harris, Chicago; Dr. E. Eliot Harris, New York; Dr.

W. A. Jayne, Denver; Dr. W. T. Sarles, Sparta, Wis.; Dr. John C. Munro, Boston, is chairman of this committee.

Committee on Organization: Dr. J. N. McCormack, Bowling Green, Ky.; Dr. George H. Simmons, Chicago; Dr. Philip Mills Jones, San Francisco.

Board of Public Instruction on Medical Subjects: Dr. J. G. Clark, Philadelphia, 1907-1911; Dr. F. F. Simpson, Pittsburg, 1907-1911; Dr. Frank Billings, Chicago, 1907-1910; Dr. George H. Monks, Boston, 1907-1910; Dr. L. S. McMurtry, Louisville, Ky., 1907-1909; Dr. Howard Kelly, Baltimore, 1907-1909; L. Emmett Holt, New York, 1907-1908.

Judicial Council: C. E. Cantrell, Texas; R. C. Cabot, Massachusetts; G. W. Guthrie, Pennsylvania; Thomas McDavitt, Minnesota.

Recognition of Branch Associations.

DR. PHILIP MILLS JONES, California:—If it is the desire of the House of Delegates, I would like to introduce a resolution. While it does not come from the Committee on Reports of Officers, it is in line with certain matters reported on by the committee, and I think embodies the previously unexpressed views of the majority of the members of that committee:

Resolved, That recognition be given to the branch associations applying for the same, subject to the adoption of the uniform constitution and by-laws, to be prepared by the Committee on Organization of this Association.

On motion, this resolution was adopted.

Professor Killian Elected an Honorary Member.

The following was presented to the House of Delegates by the Section on Laryngology and Otology:

This Section has elected Professor L. Killian, of Freiburg, Germany, an honorary member and requests the House of Delegates to confirm the same.

W. S. BRYANT, Secretary,
Section on Laryngology and Otology.

On motion of Dr. H. Bert Ellis, California, the election of Professor Killian was confirmed.

Report of the Reference Committee on Sections and Section Work.

ANESTHESIA COMMISSION.

Dr. Leartus Connor, Michigan, read the report of the Reference Committee on Sections and Section Work in regard to the Anesthetic Commission asked for in a resolution submitted by the Section on Surgery and Anatomy. (See page 2061.)

The committee suggested that the adoption of this resolution at this meeting would be inexpedient.

It was moved that the report be adopted. Seconded.

DR. F. B. LUND, Section on Surgery and Anatomy:—As delegate from the Section on Surgery and Anatomy, I would like to know why this resolution is deemed inexpedient. I think it is a good thing to have such a commission appointed. There is no great expense involved. An objection may be raised as to the chairman of the section making the appointment, but he is willing to forego that privilege, so that the House of Delegates may designate the members of the commission, and include the members of certain other sections, such as members of the Section on Obstetrics and Diseases of Women and the Section on Stomatology, who are interested in the question of anesthetics. This subject is an important one at the present time. There is a great deal of work being done in regard to anesthetics, the adoption of new anesthetics, and there are new methods of giving old anesthetics. It is a question of vital interest to the members of this Association, and I believe that we should disseminate knowledge on this subject. It does not seem to me to be expedient. I dislike very much to object to the report of the committee, but I should be sorry not to have this resolution adopted, requesting the Board of Trustees to appropriate the small amount of money for this work, not more than $500, which would be required.

DR. S. SOLIS-COHEN, Philadelphia:—On behalf of the Section on Pharmacology and Therapeutics, I would like, instead of turning the resolution down, to move as an amendment that this resolution be referred to the Board of Trustees, with the approval of the House of Delegates of its principle, and the request that the Trustees act on it in such a manner as they deem best. The question is one of sufficient importance to engage the attention of the American Medical Association. Seconded.

DR. F. D. GRAY, New Jersey:—I would like to know if any member of the committee can state briefly why the committee considers this matter inexpedient.

DR. FRANK BILLINGS, Illinois:—This is really a section matter. It is a question in the minds of the members of the Section on Surgery and Anatomy as to the value of an investigation on anesthetics; therefore, it is a section matter. That Section has a right to appoint a committee to investigate anesthetics if it so desires; but to recommend to the Trustees that an appropriation shall be provided for it is another thing. It does not seem to me that we, as a House of Delegates, should express an opinion to the Section on Surgery and Anatomy that it is either expedient or inexpedient, and as a member of the Section on Practice of Medicine and as a member of this House of Delegates, I do not want to say to the Section on Surgery that it is inexpedient to investigate anesthetics. The report should come from the Section on Surgery that it has appointed a committee on anesthetics, and it should then ask the House to recommend an appropriation from the Board of Trustees to carry out the action.

DR. CHARLES S. BACON, Illinois:—It is desirable to discuss the principles of the motion, and I must disagree with the remarks of Dr. Billings that this is purely a section matter. The investigation of anesthetics, if undertaken by the Association, will be one of such extent and importance that it will interest the whole Association, and especially the sections that are interested in anesthetics. All sections stand on an equality so far as the appropriation of money is concerned, and certainly the Section on Obstetrics and Diseases of Women, the Section on Ophthalmology, the Section on Laryngology and Otology, the Section on Surgery and Anatomy, as well as the Section on Pharmacology and Therapeutics, are interested in this matter, so that the extensive investigation which is evidently contemplated by this motion is one that should not be under the control of one section, but of all sections. Therefore, if this matter is left with the Board of Trustees, there should be provision made for the appointment of a committee which will recognize all sections.

The original motion, as amended by Dr. Solis-Cohen, was then put and carried, and the resolution was referred to the Board of Trustees.

SECTION PROGRAMS.

The Reference Committee on Sections and Section Work made the following report on the resolution presented by the Section on Cutaneous Medicine and Surgery at a previous meeting of the House of Delegates, in regard to mailing copies of the complete sectional program to each member of the Section from three to five days before the annual meeting. (See page 2061.)

The committee recommends that, in view of the publication of the preliminary program in THE JOURNAL of the American Medical Association at least thirty days before each annual meeting, the above resolution be not adopted.

On motion of Dr. Frank Billings, the recommendation of the committee was concurred in.

DR. JULIUS GRINKER, Section on Mental and Nervous Diseases: On behalf of the Section on Nervous and Mental Diseases, I wish to say that this Section has adopted a resolution similar to the one just read, namely, that papers be printed thirty days in advance of the meeting, and be sent to the members who have registered in the Section on Mental and Nervous Diseases, in order that more time be given for discussions; the number of papers to be limited to thirty, provided the Secretary can publish such papers. It is anticipated that other sections will follow in the footsteps of the Section on Ophthalmology, which has been doing this for some time.

I would respectfully request that the same course be pursued in this Section as in other sections, such as the Section on Ophthalmology, etc.

On motion of Dr. L. C. Morris, Alabama, this request was referred to Reference Committee on Section and Section Work.

INVESTIGATING COMMITTEE FOR HOT SPRINGS NOT APPROVED.

Dr. Adam Guthrie, Arkansas, introduced the following resolution, and moved its adoption:

Resolved, That this House of Delegates recommends that the President of the American Medical Association appoint a committee of three members of the Association, whose duty it shall be to investigate the conditions at Hot Springs, Ark., and take such action as seems to be suggested by reference to the therapeutic value of such springs.

Dr. C. E. Cantrell, Texas, moved the adoption of the resolution, which was seconded, put and declared lost.

EX-PRESIDENTS TO BE MEMBERS OF THE HOUSE OF DELEGATES.

Dr. J. N. McCormack, Kentucky, offered the following amendment:

Amend Section 1, Article 5, of the Constitution, by adding after the words, "Public Health and Marine-Hospital Service," the words, "the Ex-Presidents of this Association." (To lie over one year.)

EMPLOYMENT OF DENTISTS IN THE NAVY ENDORSED.

Dr. W. H. Bell, U. S. Navy, presented the following resolution:

Resolved, That it is the sense of this House of Delegates that the efforts of Surgeon-General P. M. Rixey to secure legislative authority for the employment of dentists in the U. S. Navy be approved, and that the Committee on Medical Legislation be instructed to exert such influence on Congress as in its judgment may be deemed wise in support of the measures making such provision.

On motion of Dr. Jones, this resolution was adopted.

DR. C. S. BACON, Illinois:—Last evening I had the pleasure of making the acquaintance of Dr. Burton, representative in Congress from Delaware, who, with Dr. Barchfeld, member of Congress from Pennsylvania, and Dr. Samuels, were responsible for the rejection of the osteopathic bill before the house committee. This bill undoubtedly would have passed without the aid of those gentlemen, who gave valuable counsel to the Committee on Medical Legislation that met in Washington. I took the opportunity at this meeting with Dr. Burton to invite him to attend a meeting of the House of Delegates, thinking that it would be the wish of the members of the House of Delegates to meet this gentleman who has done so much for the Committee on Medical Legislation and for the profession; and that it would be a good thing for Dr. Burton, if he desired, to meet the delegates and to see how they do business. Dr. Burton has just come into the room, and I would like to ask that we extend him an invitation to attend the remaining meetings of the House of Delegates.

DR. G. LANE TANEYHILL, Maryland:—I move that Dr. Burton be invited to the privileges of the floor.

Seconded and carried.

Dr. Burton ascended the platform, and in introducing him President Bryant said: I desire to announce to you, sir, you have been elected one of the vice-presidents of this Association. I further desire to announce that it is not only because you are an eminent physician, but because you are eminently successful in furthering the advantages, desires and beneficent propositions of the organization.

Dr. Burton said:—*Mr. President, and Members of the House of Delegates of the American Medical Association:* I am at a loss to find words to express my great appreciation of the honor which you have conferred on me. I can hardly feel that I have deserved the consideration that I have received at your hands. There are so many men in this country who have had the privilege, and possibly disposition, to do so much more for the medical profession than I have been able to do. Living as I always have in a small country town, you will understand that most doctors feel, who live in the country, that they have a right to take a vacation to attend the meetings of the American Medical Association. I have on many occasions during my life, whenever it has been within my reach, availed myself of that opportunity, very much to my advantage, and, I think, to the very great advantage of my patrons.

I have been honored probably during my life more than I have deserved to be. I think the late Alexander H. Stevens once said that the greatest honor that can be conferred on a man was to be elected governor of his state by the votes of the people. I think he was right, probably; but no less an honor comes to the man who is elected the representative of a state that only has one member in the Congress of the United States. I have the honor to be the representative in Congress from the great state of Delaware, which you know is not large enough to have more than one representative in Congress. It has some advantages only to have one, for whenever a delegation from Delaware has a caucus the vote is always unanimous. (Laughter.)

During the last session of Congress, and I suppose others, many matters came before that body in which the medical profession of the whole country was interested. At any rate, that is the way doctors viewed it. I think it is proper to say that the people, who depend on the medical profession to protect their interests, so far as health and everything in that line are concerned, are more interested than the doctors themselves. I took occasion to say to the Speaker of the House of Representatives, who is, by the way, a good friend of mine, that the medical profession was going to wait on him and ask him to recognize one of the most important and meritorious bills that was ever introduced in Congress, and one that every man and woman in this land is interested in—a bill for the reorganization and improvement of the United States Army. He insisted on his recognition of the committee to call that bill up. I took occasion to say to him: "Mr. Speaker, the common idea that these laws that come up, as a rule, in the states generally, and also that come before Congress, are for the benefit of medical men is not true. It is not the case. We wish to disabuse your mind of that idea. Any man who gets far enough advanced in his profession to occupy the position of chairman of this legislative committee needs no legislation to protect his interests. He can do well wherever he wants to live, and any man in the medical profession who desires can make a living, no matter what kind of laws surround him. These laws are for the protection of the public."

Then came the establishment of a new school in the District of Columbia known as osteopathy. Unfortunately, a member of the medical profession favored the passage of that bill in this body, and it came to the House of Representatives with that endorsement. No member of the osteopathic school failed to make use of the argument that Senator Gallinger, New England, favored this bill, and had made a speech in favor of it. It finally came to a hearing in the District of Columbia. I found out that they were going to have this hearing, and I took the opportunity to see each member of that committee. About two weeks later the acting chairman of the committee, who takes a sensible view of everything, came to me on the floor of the house and said: "Our committee is going to have a session, and I am sure two-thirds of the committee will vote in reporting favorably on this osteopathic bill. If you want to have the opportunity to appear before the committee and speak on it, you can do so."

I went before the committee and took this position, that I believed there was something good in osteopathy; that certainly massage was a good thing, and that I looked on scientific massage as being possibly some improvement on the ordinary method; but that the American Medical Association had thrown the doors wide open, had expressed a willingness and showed it to accept any man as a member of the medical profession who could pass a board of state medical examiners and become a member of his county and state medical societies, and even a member of the American Medical Association, and be in good standing everywhere. I said I thought it was against the interests of the people of the country, and especially of the District of Columbia, as well as a bad example for the Congress of the United States to set, to introduce a new system of medicine, a new school that will cause more trouble, when the American Medical Association had been good enough to let in every other school then in existence. Only one member of the committee argued against that, taking the common view that everybody ought to have a chance and every man the privilege of either having a doctor or not for treatment when sick. I argued that unless this school taught materia medica and therapeutics it could not prepare any one to administer to the wants and needs of the sick man or woman, because it became necessary to administer drugs under certain circumstances. After that talk there were only two members of the committee who voted for the bill. It has been killed in committee, and not reported favorably.

Now, gentlemen, two medical men in a body of nearly 400 (I think there are 386 members in Congress and 7 delegates) have very little chance to do their duty toward the medical profession in this great country, and I believe it is the duty of the American Medical Association through its members to bring about a condition of things whereby more members will take an interest in politics and more of them be willing to make the sacrifice that in many cases is necessary to be made to represent their districts in the Congress of the United States. (Applause.) There ought to be, at least, 50 members in the House of Representatives of the United States to compare with other countries, where I think you will find one-fourth or one-eighth of the membership is composed of members of the medical profession. There is no reason in the world why doctors should not take an interest in political matters. I believe when any man will stand up and look in the faces of a body of medical men, he will conclude that these men have sufficient executive ability and good sense to help manage the affairs of this country; that they are the kind of men we want, and not the men who can make flowery speeches, or who are chronic objectors, but men who will work in committees. Those are the kind of legislators we need.

I thank you kindly, and if there is anything in my power I can do hereafter to repay the American Medical Association for this high honor, I am ready to do so. I thank you. (Applause.)

Resolution of Thanks to the Citizens of Atlantic City.

Dr. Philip Mills Jones, California, offered the following:

Resolved, That it is the sense of this House of Delegates that Atlantic City has been found eminently satisfactory as a meeting place, and the thanks of the Association be extended to the local medical profession and to the citizens of Atlantic City for their uniform courtesy and hospitality.

On motion of Dr. C. E. Cantrell, Texas, the resolution was unanimously adopted.

Roentgen Ray Resolution.

REFERRED TO REFERENCE COMMITTEE ON HYGIENE AND PUBLIC HEALTH.

Dr. Denslow Lewis, Section on Hygiene and Sanitary Science, said he was requested to introduce the following resolution by the Section on Hygiene and Sanitary Science:

WHEREAS, Time has shown that the employment of the Roentgen ray by unqualified persons is attended by danger to the public; and

WHEREAS, There has also been shown its marked physiologic activity and influence on metabolism; therefore, be it

Resolved, That it is the opinion of the American Medical Association, as has been shown in France, Germany, Austria and England, that the employment of the Roentgen ray on the human body for diagnosis or treatment, should be restricted to those qualified by education to practice medicine and surgery and so licensed by the medical board of the several states.

On motion of Dr. N. Fred Essig, Washington, the resolution was referred to the Reference Committee on Hygiene and Public Health.

Davis Memorial Appropriation.

DR. T. J. HAPPEL, Chairman of the Board of Trustees:—There has been sent to the Board of Trustees from the House of Delegates, without recommendation, a request for the appropriation of five thousand dollars toward the erection of a monument commemorating the services of Dr. N. S. Davis as the founder of the Association. That comes to us, I say, without recommendation. It calls for a large sum of money and, as Chairman of the Board of Trustees, I do not feel personally willing to assume the responsibility of saying that there shall or shall not be appropriated this amount of money. The Board of Trustees would like very much to have an expression of opinion from the House in regard to the appropriation of this money. It is your money. It does not belong to the Board of Trustees. If you have any better use for it, refuse to appropriate it; if not, I can say personally and as a member of the House I would appropriate that sum for this purpose; but as a member of the Board of Trustees I am not willing to act without advice. I would say that much.

Repeating a conversation which I had with Dr. Marey, who made the request and motion, I will say that we have had returned to us the sum of $5,000, which was appropriated for the benefit of the California sufferers. If you remember, the House of Delegates directed the Board of Trustees to appropriate $5,000 to go toward the earthquake sufferers in California. This whole amount has been returned and deposited in the treasury of the Association. While I am personally willing to appropriate that much, I am not willing, as a member of the Board of Trustees, to assume the responsibility of voting that amount of money.

DR. G. LANE TANEYHILL, Maryland:—Those of us who have been members of the Association for many, many years—some of us forty years—revere the memory of Dr. N. S. Davis and respect his son, and those of us who knew him forty years ago and were associated with him know the great interest he took in this Association. Some of us call him the Father of the Association, although there are members in New York who think differently. Now, as the $5,000 referred to has been turned into the treasury of the Association, and as Dr. Davis was a broad, good, Christian, medical gentleman, I think this House of Delegates would do itself an honor to vote this amount of money toward the erection of a monument to his memory, and I move, sir, that this House of Delegates direct the appropriation of that amount. Seconded.

DR. C. S. BACON, Illinois:—There is no one who reveres the memory of Dr. N. S. Davis more than I, but I do not hesitate to say that I shall vote against this motion. I think it is unwise and very unbusinesslike, and we would not be true to our duties as delegates of the Association to act in this manner. I think it would be establishing a precedent that is very dangerous to appropriate such a sum of money from our treasury for this purpose, and this motion ought to at least receive the very serious consideration of the members of the House of Delegates.

The question is, What is the reason for asking this appropriation? This committee has been in existence for two years. It has raised (I do not know how much) a few hundred dollars. The committee's report does not convince me that all the methods and measures that should have been adopted have been taken to raise this money in another way. I feel it would be unwise to take this action at this time.

DR. LEWIS S. MCMURTRY, Kentucky:—I think if the sense of this house were taken, representing the entire Association, we would all be of one mind on this question. There is no doubt about that. If I understand the situation, it is this: The Chairman of the Board of Trustees (Dr Happel) has come before us and stated that the Board of Trustees does not feel like assuming this responsibility without our full knowledge, approval and suggestion. The Board of Trustees knows the resources of the Association far better than any one of us, and I therefore move, as a substitute for the motion, that the matter be referred to the Board of Trustees, with the commendation of this House of Delegates, and for the Board to make such an appropriation as it deems wise and proper. This gives them authority, and whatever they may do we will be satisfied.

Dr. Taneyhill:—I accept that.

DR. H. BERT ELLIS:, California:—Appropriating money for this purpose hardly comes under the objects of this Association. While I revere Dr. Davis and recognize his distinguished services to this Association, at the same I do not think it is going to advance medicine to appropriate such a large amount of money, or any amount for that matter. This subject has come up in several states, and I do not think that this Association should spend its money in that way.

DR. S. SOLIS-COHEN, Section on Pharmacology and Therapeutics:—There are times when a man must, against his feelings, object, not for the purpose of delaying business, but for the purpose of giving deliberate consideration to an important subject. It has been said on the other side that action on the part of the House of Delegates in regard to this matter would establish a precedent which may appear on deliberate consideration to be unwise. We must not permit ourselves to be carried away by sentiment, or by reverence for a member. This is a question of the appropriation of public funds. The funds are not those of the Board of Trustees, nor those of the House of Delegates. The funds are those of the medical profession of the United States as represented in this organization, and, sir, I very much doubt if it is within the province of a medical association, organized and supporting as this is to appropriate money for monuments to anybody. I should very much hesitate to vote in favor of this motion. I shall be pleased myself, now that the matter has been brought before us, to send my personal subscription for what I can afford to the committee who has this matter in charge, and if a monument can be erected by individual subscription, I think it would be much better than dipping our hands into a public fund, concerning which I think our right to expend it in that way is doubtful.

DR. WILLIAM JEPSON, Iowa:—Not being acquainted with the wording of the resolution under which this committee was appointed to raise funds for the erection of a suitable memorial or monument to the late Dr. N. S. Davis in recognition of his work to this Association, I presume that this Association, through its House of Delegates, wants to extend to Dr. Davis that recognition, and through what channel can it come more appropriately or properly than here? If it is not the sense of this House of Delegates that it wants to recognize the services of Dr Davis, why has it appointed a committee for that purpose?

If it is the intention that the members of this committee shall go out and secure private subscriptions for the erection of this monument, why should the Association take any hand in it whatsoever?

As a member of this committee in our State (Iowa), I stated to the House of Delegates of the Iowa State Medical Society that it was proper that we should appropriate such a sum of money as may be necessary for the purpose, no definite sum being determined on. I said that a sum of $15,000 would doubtless be raised from different sections of the country. Our House of Delegates appropriated $300. If it is not the sense of the House of Delegates that it wants to commemorate the memory of Dr. Davis, then let us discharge the committee.

DR. N. FRED ESSIG, Washington:—This is not the first time the Association has taken up the matter of erection of a monument to a member of the medical profession. This is not the first committee that has been appointed by the American Medical Association to carry out the desires and wishes of this body, but as was so clearly expressed by Dr. Cohen, I do not believe it comes within the province of the House of Delegates to appropriate the money of this Association for

the purpose of erecting a monument, however, much I revere the memory of Dr. Davis. I am, however, ready, as a member of this House, to contribute my individual share of the $5,000 asked for, and to hand it to the secretary now, but I am opposed to the appropriation of the funds of this Association for the erection of a monument to Dr. Davis.

DR. C. E. CANTRELL, Texas:—This question has come home to us in our county medical society in Texas. Our county medical society donated a small amount for this purpose. The matter was brought up before the Texas State Medical Association, and the board of trustees instructed to contribute whatever it felt the association could spare for this purpose.

Now, if the committee from the House of Delegates has the authority to ask county medical societies to make appropriations for this purpose, it seems to me it would be proper for this House to appropriate such funds as it thinks wise. The way we are dealing with this matter in Texas is to allow the board of trustees in its discretion to appropriate whatever sum it feels we can afford for this purpose, and if this House of Delegates can not afford to make an appropriation for the erection of this monument, I am sure we would like to have sent back what we have paid in Texas.

Secretary Simmons then read the resolution creating the Committee on the N. S. Davis Memorial Fund from the minutes of the Portland meeting.

DR. PETER W. TOMLINSON, Delaware:—It seems to me unfair that a matter so vitally important as this should be brought up at this time, when there are so few members of the House of Delegates present to transact business, and I would therefore move that the further consideration of this subject be postponed for one year.

Seconded by Dr. L. C. Morris, Alabama, and carried.

Dr. Lewis S. McMurtry, Kentucky, offered the following:

Resolved, That the Secretary be requested to have furnished to the California State Medical Association a complete card index for the physicians of the State of California, without cost to that society.

Seconded and carried.

Dr. J. N. McCormack, Kentucky, offered the following resolution:

Resolved, That the cordial thanks of the House of Delegates be hereby extended to President Bryant for the distinguished ability and impartiality and success with which he has presided over its deliberations.

The resolution was seconded by several and unanimously carried by rising vote.

Nominations for Committee on Revision of U. S. P.

Dr. S. Solis-Cohen, Section on Pharmacology and Therapeutics:—I have received from the Section on Pharmacology and Therapeutics a list of nominations for the Committee on Revision of the United States Pharmacopeia, a motion for the appointment of which I presented this morning to the Board of Trustees. I ask that this list of names be likewise so referred. This list is as follows (12 names, 6 to be elected):

E. E. Hyde, Chicago; A. L. Benedict, Buffalo, N. Y.; Geo. Dock, Ann Arbor, Mich.; J. Forchheimer, Cincinnati; Robt. A. Hatcher, New York; Reed Hunt, Washington, D. C.; P. M. Jones, San Francisco; H. Edwin Lewis, New York; O. T. Osborne, New Hampshire; W. J. Robinson, New York; W. S. Thayer, Baltimore; S. Solis-Cohen, Philadelphia.

The secretary read the following telegram from the president of the American Pharmaceutical Association:

"Hearty Greetings from American Pharmaceutical Association, wishing successful, profitable and enjoyable meeting.

LEO ELIEL, President."

It was moved and seconded that the House adjourn.

THE PRESIDENT:—Before putting the question to adjourn, I desire to say to the members of the House of Delegates, I appreciate very much indeed the expression of confidence which they have bestowed on me. If I have met your approval so far as executive ability and equity of action are concerned, I can only say that I have simply endeavored to do what was right, and I thank you for your appreciation of my success. I hope to meet you again next year, and I trust on that occasion I will have no greater difficulty than has ensued on this one. (Applause.)

The House the adjourned, *sine die*.

OFFICIAL MINUTES—GENERAL MEETINGS

First General Meeting—Tuesday, June 4

The Association met in the Auditorium of Young's New Pier. On the platform were ex-presidents, vice-presidents, members of the Board of Trustees, and distinguished foreign physicians.

President Mayo called the meeting to order at 10.40 a. m.

Prayer was offered by the Rev. H. M. Gessner, pastor of the First Presbyterian Church, Atlantic City.

Address of Welcome by Mayor Stoy.

At the close of the invocation, President Mayo introduced Mayor F. P. Stoy, of Atlantic City, who said:

Mr. President, Ladies and Gentlemen, and Members of the American Medical Association:—I feel it an honor this morning to represent the citizens of Atlantic City in bidding you welcome. I have had the pleasure of extending a welcome to you in this city once before, and it comes as a double pleasure to me this morning to welcome you in behalf of our people and to extend to you the freedom of the city.

We trust that your stay with us will be a pleasure to you, not only individually, but collectively, and that you will go from here feeling that you have done something for the benefit of humanity in many ways.

I am glad this morning that I am placed at the head of this list of speakers, because it is a lengthy program, and therefore I am not expected to make a very long speech.

I want to say to you, that we feel that in extending to you the freedom of the city, we should turn over this great city to you; but there is another delegation here to-day—not doctors but brewers (laughter). A portion of my time must be spent with both delegations (renewed laughter).

Before leaving, I want to say to you, Mr. President, that the Department of Public Safety has been apprised of your presence here, and your official badges will be recognized by those in authority. Let me say that during the last two days of your convention it will be necessary for me to be absent from the city, and I am going to turn over the town to the doctors, and especially to your President, who will have to have some one to help him out. It will be necessary for him to appoint a night-mayor (laughter), and then it will perhaps be necessary for him to have the key of the city. I am going to turn over the key of the city this morning to Dr. Mayo, and I trust that in my absence he will find a great deal of pleasure in holding office for two days. (Here Mayor Stoy presented Dr. Mayo with a large nickel-plated key amid great laughter.) I trust that in carrying around that key, Mr. President, as I have in the last two years, you will have a good deal of pleasure, and that no harm will come to you in my absence. I thank you (applause).

Address of Welcome by Dr. Marcy.

President Mayo then introduced Dr. Alexander Marcy, president of the Medical Society of New Jersey, who delivered the following address of welcome on behalf of the medical profession of New Jersey:

Mr. President, Ladies and Gentlemen:—I appreciate very much the privilege of extending to you the cordial and sincere welcome of the medical profession of New Jersey. We feel highly honored, yea, even flattered, at having you with us again so soon. I think I may safely say that it is unusual in the history of this Association for it to meet as frequently in the same place as it has met in Atlantic City, this being as you know the third meeting held here in the past seven years. We are very proud of this, and it will be our endeavor to make your sojourn here so pleasant, that you will instinctively turn your thoughts in this direction again and again during the coming years. That it is a distinction, as well as an honor to entertain this great association, none will deny, and as it continues to grow in importance and influence, fortunate indeed will be the place that secures this coveted prize. The growth of the Association has been so rapid, and its numbers are getting to be so great, that few places can offer you

the accommodations necessary for your comfortable entertainment; this being so, it would seem as though sooner or later the question of a permanent meeting place would have to be considered, and when such a time does arrive, we of New Jersey will offer for your consideration our own matchless, incomparable Atlantic City, and say to you, come and abide with us permanently, and forever, and honor us in your coming.

The growth of this Association has been marvelously rapid, and truly great and the end is not yet. Little did the founders of it realize its great destiny, even though they were endowed with a prophetic vision, that looked away down the ages, and pictured to themselves an association, large in numbers, great in influence, and marvelous in results. That these results have been the work of a comparatively few years, is not surprising, when we consider how necessary the Association is to the best interests of the profession. We are as yet but in our infancy, and although we have accomplished much, there is still much to be accomplished, and the future of the American Medical Association fairly dazzles us with the brilliancy of its possibilities. The time will surely come when it will not only be an honor to be a member of this Association, but it will also be a necessity, and no reputable practitioner of medicine in this great country, will feel that he can afford to be without the fold. There is much work yet to be done gentlemen, and in order to do it as it should be done, we must all be actuated by the self-same altruistic spirit of devotion to the best interests of this Association which has been exhibited by those who have placed it where it now is. If we could all be imbued with the same spirit of devotion, and power which has been exhibited by our faithful Secretary-Editor and our peerless Organizer, I believe that the future of our Association would be so far beyond anything that we can even think, or hope, or wish, that our minds would be incapable of accepting it as the truth, every doctor in these United States a member, every member vieing one with the other, as to which could perform the greatest service, each striving to out-do the other for the advancement of the Association's best interests, each willing to take the lowest place rather than scheming for the highest, in fact sinking self and considering only the greatest good of the Association. When such conditions as these come to pass, of course, the millennium will have arrived and our Association will have been crowned with honor, with power and with usefulness, and have reached the very zenith of its glory, it will have become a blessing to suffering humanity, a veritable benediction to the profession. It is both gratifying and delightful to see so many representatives from other countries meeting with us, and we extend to them a most cordial greeting both on behalf of our state, and country, for it matters not whether they come from the countries, from the north, or from the south, from the east, or from the west, we are all united in purpose and in desire, and our energies are all put forth in the one great effort to uplift humanity, to prevent sickness and suffering and death.

Long may our Association live, yea, as long as time itself shall last, and when in the fulness thereof, death is swallowed up in victory, may this great Association of medical men appear, those of the past, those of the present, as well as those of the future, at the head of the triumphal host, that shall appear before the Great White Throne. Again Mr. President, ladies and gentlemen, I bid you welcome, thrice welcome, to our country, to our state, to our city, and I trust your stay with us will be as pleasant as I know it will be successful.

At the conclusion of Dr Marcy's address, the following distinguished foreign guests were introduced to the Association by President Mayo: Prof. Gustav Killian, Freiberg, Germany; Dr. Charles Trow, Toronto, Canada; Dr George T. Ross, Montreal, Canada; Prof. Schmieden; Prof. Patterson; Dr. D. G. Wishart, Toronto, Canada; Dr. J. W. Stirling, Montreal, Canada; Prof. Hess, Wurtzburg; Dr. Reeves, Toronto, Canada; Prof. J. G. Adami, Montreal, Canada.

Dr. Philip Marvel, Chairman, read the report of the Trustees' Committee of Arrangements.

Report of Local Committee of Arrangements.

Dr. W. Blair Stewart, Chairman, presented the following verbal report as Chairman of the Local Committee of Arrangements:

Mr. President, and Members of the American Medical Association:—On behalf of the local medical profession of Atlantic City, I extend to you a most cordial welcome, and trust that your stay here may be a pleasant one.

The Committee of Arrangements has prepared for the coming week a series of functions, arranged in such a manner as not to interfere in any way with the meetings of the Association.

The first day, Tuesday, has been set apart by the Trustees for the alumni smokers, reunions, and for the Section banquets. The alumni associations of the University of Pennsylvania, of Jefferson Medical College, of the Medico-Chirurgical College of Philadelphia, and of Rush Medical College of Chicago have all arranged for reunions this evening, beginning at 9 o'clock.

We have arranged for a steam train to leave the Pennsylvania Railroad depot at half-past 12 o'clock to-night for the accommodation of members who reside in Philadelphia and surrounding cities, who may desire to reach their homes tomorrow morning early.

The entertainments that have been arranged for Wednesday are rather limited. We have arranged through the Trustees' Committee and the Local Committee of Arrangements for the President's reception, which will be followed by a dance, which is to be held in the Steel Pier, Virginia Avenue.

On Thursday evening, you will also note by your official program, that there are two musicales to be held in separate rooms on the Steel Pier, and following these musicales two smokers will be held, one in the New Berkley Café, and the other in the Palm Garden of Hotel Islesworth. The members of the Association are expected to bring their ladies with them on this occasion (applause). The vaudeville entertainment, which has been provided for them for that occasion, is absolutely high class in every particular and fit for any assemblage of people.

On Friday afternoon and Friday evening the committee has placed at your disposal several local entertainments that will be contributed by different ones in the city. This you will find in the program.

I can not speak in too great words of praise for the Ladies' Committee. The visiting ladies are requested to be present at every entertainment, and they will be most cordially received. This committee has prepared for Wednesday afternoon a reception and tea, to be given at the Hotel Marlborough-Blenheim.

On Thursday afternoon there will be a sailing party, a reception and tea at the Atlantic City Yacht Club, Massachusetts Avenue, north.

I wish to call attention to the fact that the souvenir button of the American Medical Association that is given to every registered member of the Association, and also the guest button, with blue ribbon attached, with a monogram on it, are the official buttons recognized all over the city, and give free entrance to every function provided for the Association, as well as to the piers, during the meeting of the Association.

Again, Mr. President, we extend to you and to the members of the Association a most hearty welcome, and trust that you may see your way clear to come back to Atlantic City in the near future (applause).

President Mayo then introduced the President-elect, Dr. Joseph D. Bryant, New York City, who then delivered his address. He selected for his subject, "The American Medical Association, Its Aims and Interests." The address was punctuated throughout its delivery with applause. This address was published in THE JOURNAL, June 8. (See page 1909.)

Adjourned.

Second General Meeting—Tuesday, June 4

The Association met at 7:30 p. m., in the First Presbyterian Church, with President Bryant in the Chair.

Dr. James B. Herrick of Chicago delivered the Oration on Medicine.

Dr. William H. Wathen, Louisville, followed with the Oration on Surgery.

These were published in THE JOURNAL, June 8. (See pages 1915 and 1919.) Adjourned.

Third General Meeting—Wednesday, June 5

The Association met at the First Presbyterian Church at 7:30 p. m.

Dr. Samuel G. Dixon of Harrisburg, Pa., delivered the Oration on State Medicine.

This was published in THE JOURNAL, June 8.

This was published in THE JOURNAL, June 8. (See page 1926.)

Adjourned.

Members of House of Delegates in Attendance

[The number after the state name indicates the number of delegates to which the state is entitled.]

ALABAMA—3.
L. C. Morris, Birmingham.
W. H. Sanders, Montgomery.
J. D. S. Davis, Birmingham.

ARIZONA—1.

ARKANSAS—2.
Adam Guthrie, Prescott.

CALIFORNIA—3.
H. Bert Ellis, Los Angeles.
Philip Mills Jones, San Francisco.
W. F. Snow, Palo Alto.

COLORADO—2.
J. N. Hall, Denver.
Hubert Work, Pueblo.

CONNECTICUT—2.
D. Chester Brown, Danbury.
W. H. Carmalt, New Haven.

DELAWARE—1.
Peter W. Tomlinson, Wilmington.

DIST. OF COLUMBIA—1.
George N. Acker, Washington.

FLORIDA—1.
Joseph Y. Porter, Key West.

GEORGIA—2.
Floyd McRae, Atlanta.
H. F. Harris, Atlanta.

HAWAII—1.

IDAHO—1.

ILLINOIS—7.
Charles L. Mix, Chicago.
George W. Webster, Chicago.
J. L. Wiggins, East St. Louis.
Frank Billings, Chicago.
C. S. Bacon, Chicago.
D. G. Smith, Elizabeth.
R. T. Gilmore, Chicago.

INDIANA—4.
E. D. Clark.
W. N. Wishard, Indianapolis.
John T. Dickes, Portland.
C. A. Daugherty, South Bend.

IOWA—3.
Wm. Jepson, Sioux City.
S. Bailey, Mt. Ayr.
W. L. Allen, Davenport.

KANSAS—3.
J. E. Sawtelle, Kansas City.
C. E. Bowers, Wichita.

KENTUCKY—3.
Lewis Samuel McMurtry, Louisville.
J. N. McCormack, Bowling Green.
W. W. Richmond, Clinton.

LOUISIANA—2.
V. A. Miller, Lake Arthur.
Chas. McVea, Baton Rouge.

MAINE—1.
E. M. Fuller, Bath.

MARYLAND—2.
Harry Friedenwald, Baltimore.
G. L. Taneyhill, Baltimore.

MASSACHUSETTS—6.
Walter P. Bowers, Clinton.
Edward H. Bradford, Boston.
C. H. Cook, Natick.
R. C. Cabot, Boston.
D. J. Brown, Springfield.
Chas. Harrington, Boston.

MICHIGAN—4.
Leartus Connor, Detroit.
H. O. Walker, Detroit.
Reuben Peterson, Ann Arbor.
A. I. Lawbaugh, Calumet.

MINNESOTA—2.
H. A. Tomlinson, St. Peters.
Thos. McDavitt, St. Paul.

MISSISSIPPI—2.
John Darrington, Yazoo City.

MISSOURI—4.
O. B. Campbell, St. Joe.
F. R. Anthony, Maryville.
F. E. Murphy, Kansas City.
John Green, Jr., St. Louis.

MONTANA—1.
Donald Campbell, Butte.

NEBRASKA—2.
F. A. Long, Madison.

NEVADA—1.
J. E. Pickard, Virginia City.

NEW HAMPSHIRE—1.
John M. Gile, Hanover.

NEW JERSEY—3.
Luther N. Halsey, Williamstown.
Chas. J. Kipp, Newark.
F. D. Gray, Jersey City.

NEW MEXICO—1.
W. R. Tipton, Las Vegas.

NEW YORK—11.
Wisner R. Townsend, New York City.
Abraham Jacobi, New York City.
J. W. Grosvenor, Buffalo.
H. D. Wey, Elmira.
C. F. Comstock, Saratoga.
D. C. Morlarta, Saratoga.
W. S. Ely, Rochester.
W. G. LeBoutillier, New York City.
A. T. Bristow, Brooklyn.
H. L. Elsner, Syracuse.
F. D. Reese, Cortland.

NORTH CAROLINA—3.
J. W. Long, Greensboro.
Martin L. Stevens, Asheville.
J. F. Highsmith, Fayetteville.

NORTH DAKOTA—1.
V. H. Stickney, Dickinson.

OHIO—6.
A. B. Walker, Canton.
C. A. L. Reed, Cincinnati.
J. H. Jacobson, Toledo.
C. L. Bonifield, Cincinnati.
F. D. Bain, Kenton.
Brooks F. Beebe, Cincinnati.

OKLAHOMA—2.
A. K. West, Oklahoma City.

OREGON—1.
H. W. Coe, Portland.

PENNSYLVANIA—8.
Fremont W. Frankhauser, Reading.
Wm. T. Williams, Mt. Carmel.
Samuel Wolfe, Philadelphia.
Alexander R. Craig, Philadelphia.
Geo. W. Guthrie, Wilkes-Barre.
Edward B. Hecker, Pittsburg.
Walter Lathorp, Hazelton.
John Fay, Altoona.

PHILIPPINE ISLANDS—1.
John R. McDill, Manila.

RHODE ISLAND—1.
John Champlin, Westerly.

SOUTH CAROLINA—2.
J. H. Hamilton, Union.

SOUTH DAKOTA—1.
H. J. Rock, Aberdeen.

TENNESSEE—2.
S. W. Woodyard, Greeneville.

TEXAS—5.
C. E. Cantrell, Greenville.
J. T. Wilson, Sherman.
S. T. Turner, El Paso.
W. J. Vinsant, Pecos.
Frank O. Norris, Eagle Lake.

UTAH—1.
A. C. Behle, Salt Lake City.

VERMONT—1.
J. H. Jackson, Barre.

VIRGINIA—3.
Wm. E. Anderson, Farmville.
Wm. F. Drewry, Petersburg.
Stuart McGuire, Richmond.

WASHINGTON—1.
N. Fred Essig, Spokane.

WEST VIRGINIA—1.
J. E. Cannaday, Hansford.

WISCONSIN—3.
W. T. Sarles, Sparta.
B. M. Caples, Waukesha.

WYOMING—1.
A. C. Godfrey, Lander.

SECTIONS.

PRACTICE OF MEDICINE—1.
John H. Musser, Philadelphia.

OBSTETRICS AND DISEASES OF WOMEN—1.
W. B. Dorsett, St. Louis, Mo.

SURGERY AND ANATOMY—1.
F. B. Lund, Boston.

HYGIENE AND SANITARY SCIENCE—1.
Denslow Lewis, Chicago.

OPHTHALMOLOGY—1.
S. D. Risley, Philadelphia.

DISEASES OF CHILDREN—1.
T. S. Southworth, New York.

STOMATOLOGY—1.
G. V. I. Brown, Milwaukee.

NERVOUS AND MENTAL DISEASES—1.
Julius Grinker, Chicago.

CUTANEOUS MEDICINE AND SURGERY—1.
H. R. Varney, Detroit.

LARYNGOLOGY AND OTOLOGY—1.
Otto Freer, Chicago.

PHARMACOLOGY AND THERAPEUTICS—1.
Solomon Solis-Cohen, Philadelphia.

PATHOLOGY AND PHYSIOLOGY—1.
W. S. Hall, Chicago.

UNITED STATES ARMY—1.
Major Charles Richard, Fort Joy, New York City.

UNITED STATES NAVY—1.
Surgeon Wm. Hemphill Bell, Washington, D. C.

U. S. PUBLIC HEALTH AND MARINE-HOSP. SERVICE—1.
Surgeon R. M. Woodward, Boston.

OFFICERS OF SECTIONS

The official minutes of the sections will be given later, as will also the list of members registered. Following are the officers elected by the sections:

PRACTICE OF MEDICINE.

Chairman—C. F. Hoover, Cleveland, Ohio.
Secretary—Joseph L. Miller, 100 State St., Chicago.
Delegate—George Dock, Ann Arbor, Mich.
Executive Committee—Richard C. Cabot, Boston; Herbert C. Moffitt, San Francisco; Thomas D. Coleman, Augusta, Ga.

OBSTETRICS AND DISEASES OF WOMEN.

Chairman—Walter B. Dorsett, St. Louis.
Vice-Chairman—Charles P. Noble, Philadelphia.
Secretary—W. P. Manton, 32 W. Adams Ave., Detroit.
Delegate—F. F. Simpson, Pittsburg, Pa.
Executive Committee—C. L. Bonifield, Cincinnati; Charles S. Bacon, Chicago; J. Wesley Bovée, Washington, D. C.

SURGERY AND ANATOMY.

Chairman—Rudolph Matas, New Orleans.
Vice-Chairman—J. C. DaCosta, Philadelphia.
Secretary—Willard Bartlett, St. Louis.
Delegate—Charles N. Dowd, New York City.
Executive Committee—Maurice H. Richardson, Boston; Robert F. Weir, New York City; Arthur D. Bevan, Chicago.

HYGIENE AND SANITARY SCIENCE.

Chairman—William C. Gorgas, Ancon, Canal Zone, Panama.
Vice-Chairman—Seneca Egbert, Philadelphia.
Secretary—S. T. Armstrong, 144 East 87th St., New York City.
Delegate—N. K. Foster, Sacramento, Cal.
Executive Committee—John S. Fulton, Baltimore; Denslow Lewis, Chicago; Prince A. Morrow, New York.

OPHTHALMOLOGY.

Chairman—William Wilder, Chicago.
Vice-Chairman—W. C. Posey, Philadelphia.
Secretary—Albert E. Bulson, Jr., Fort Wayne, Ind.
Delegate—W. Marple, New York City.
Executive Committee—C. R. Holmes, Cincinnati; Lewis H. Taylor, Wilkes-Barre, Pa.; G. C. Savage, Nashville, Tenn.

DISEASES OF CHILDREN.

Chairman—E. E. Graham, Philadelphia.
Secretary—Samuel Walker, Chicago.
Delegate—Thomas Parke, Birmingham, Ala.
Executive Committee—John Lovett Morse, Boston; W. C. Holloppeter, Philadelphia; J. Ross Snyder, Birmingham, Ala.

STOMATOLOGY.

Chairman—E. A. Bogue, New York City.
Vice-Chairman—James E. Power, Providence, R. I.
Secretary—Eugene S. Talbot, 103 State St., Chicago.
Delegate—M. L. Rhein, New York City.
Executive Committee—Vida A. Latham, Chicago; H. P. Carlton, San Francisco; M. I. Schamberg, New York City.

NERVOUS AND MENTAL DISEASES.

Chairman—T. H. Weisenburg, 2030 Chestnut St., Philadelphia.
Secretary—William Alexander Jones, Minneapolis.
Delegate—Morton Prince, Boston.
Executive Committee—J. H. McBride, Pasadena, Cal.; Wharton Sinkler, Philadelphia; Morton Prince, Boston.

CUTANEOUS MEDICINE AND SURGERY.

Chairman—M. B. Hartzell, Philadelphia.
Vice-Chairman—Granville MacGowan, Los Angeles, Cal.
Secretary—M. L. Heidingsfeld, 19 West 7th St., Cincinnati.
Delegate—R. R. Campbell, Chicago.
Executive Committee—Henry G. Anthony, Chicago; Douglas W. Montgomery, San Francisco; R. R. Campbell, Chicago.

LARYNGOLOGY AND OTOLOGY.

Chairman, H. W. Loeb, St. Louis.
Vice-Chairman—Dunbar Roy, Atlanta, Ga.
Secretary—W. Sohier Bryant, 57 W. 53d St., New York City.
Delegate—O. T. Freer, Chicago.
Executive Committee—Robert C. Myles, New York City; Otto T. Freer, Chicago; S. MacCuen Smith, Philadelphia.

PHARMACOLOGY AND THERAPEUTICS.

Chairman—M. F. Fussell, Philadelphia.
Vice-Chairman—W. W. Tompkins, Charleston, W. Va.
Secretary—C. S. N. Hallberg, 36 Twelfth Street, Chicago.
Delegate—S. Solis-Cohen, Philadelphia.
Executive Committee—Heinrich Stern, New York City; Thomas F. Reilly, New York City; H. C. Wood, Jr., Philadelphia.

PATHOLOGY AND PHYSIOLOGY.

Chairman—W. B. Cannon, Harvard Medical School, Boston.
Secretary—M. J. Rosenau, Washington, D. C.
Delegate—W. M. L. Coplin, Philadelphia.
Executive Committee—Winfield S. Hall, Chicago; Henry A. Christian, Boston; Walter L. Bierring, Iowa City, Iowa.

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Society Proceedings

COMING MEETINGS.

Medical Society of New Jersey, Long Branch, June 25-27.
Oregon State Medical Association, Seaside, July 12-13.

AMERICAN ACADEMY OF MEDICINE.

Fifty-Second Annual Meeting, held at Atlantic City, June 1 and 3, 1907.

The President, DR. CASEY A. WOOD, Chicago, in the Chair.

Insurance for Defectives.

DR. JAMES A. SPALDING, Portland, Maine, said that this topic covered both accident and life insurance, arguing that if accidents occur oftener to defectives than to those who are perfect their lives are more endangered. Having been refused renewal of an accident policy under very odd circumstances, he investigated the topic especially from the position of those who are like himself, deaf. He discovered that those who hear run many risks apparently more dangerous than those who are deaf, owing to other causes. He found that many accidents occur to all persons alike, for example, in railroad wrecks. For that reason, among others, the deaf and other defectives ought to have an adjustable insurance covering such accidents as are liable to all, and excluding special classes of accidents. In addition to the deaf, many who ought really to come under the head of less desirable risks include those with but one perfectly hearing ear, those with one bad eye, the lame, those who are highly myopic or myopic in one eye with normal sight in the other. Many people are absent-minded.

Many rush along too fast and can not recover themselves. Just as some companies ask higher rates for the syphilitic, in certain stages, so accident insurance should be more carefully overhauled and better provision made for the defectives. It is considered desirable that standards should be set for a proper insurance both for accident and for life, by going into the minute defects rather than into so many family defects which might be called gross.

DISCUSSION.

DR. JAMES EVELYN PILCHER, Carlisle, Pa., had had an experience somewhat similar to Dr. Spalding in the rejection for insurance. He agreed with Dr. Spalding that people who are defective more than compensate for their lack in the added care which they take or in the added excitation of some other sense. He does not think it necessary that there should be an extra premium for the insurance of defectives, but if such insurance can not be obtained otherwise, he feels that a movement in this direction should be started.

The Academic Training for Medicine.

The committee appointed to investigate the value of the first degree in American colleges referred to the previous reports: To the first, in which the academic culture really to be desired, was discussed. To the second, in which the legal requirements were set forth and the obstacles in them, to a proper interscholastic relation of the schools. Some points presented in the report were: The faulty curriculum of the medical school; the time element, making it desirable to shorten the preparatory studies either from philosophic or economic grounds; the plans for condensation or shortening; the difficulties in the way of co-ordination of secondary, collegiate and technical education. An outline course is suggested, involving changes in each class of schools.

To make the suggestions effective the committee recommends: 1. That the academy hold a meeting for the full discussion of these problems, to which representatives of educational institutions be invited for a full discussion of the subject. 2. An outline program for this meeting. 3. That the American Academy of Medicine act as a central bureau to give efficiency to the conclusions of the conference.

The Communal Life of Physicians; Its Cultivation and Value.

DR. LEARTUS CONNOR, Detroit, defined the communal life of physicians, outlined methods for its cultivation and presented estimates of its value under the following heads: 1. The individual physician. 2. Physicians as a unit. 3. Physicians' outside communal life. 4. The laity. 5. Medical science and art. It was shown that individual growth, professional development and medical triumphs await a clearer perception and unswerving obedience to the obligations of the communal life of physicians.

Officers Elected.

The following officers were elected: President, Dr. Thomas D. Davis, Pittsburg; vice-presidents, Drs. James K. McBride, Pasadena, Cal.; F. T. Rogers, Providence; Lewis S. McMurtry, Louisville, and A. M. Holmes, Denver; secretary and treasurer, Dr. Charles McIntire, Easton, Pa.; assistant secretary, Dr. Alex. R. Craig, Philadelphia.

(To be continued.)

AMERICAN SURGICAL ASSOCIATION.

Annual Meeting, held at Washington, D. C., May 7-9, 1907.

(Continued from page 1984.)

Desirability of Early Operation in Ischemic Paralysis.

DR. LEONARD FREEMAN, Denver, Colo., stated that energetic massage, passive and active movements, electricity, etc., should be given a faithful trial, but if improvement in nerve function does not begin promptly and progress satisfactorily, an early operation should be done to relieve the nerve trunks from pressure before they become hopelessly injured, and also for the purpose of aiding the recovery of the muscles by improving their innervation. If this rule were followed the author is convinced that the usefulness of many hands would be preserved. Sometimes the removal of a section of hopelessly damaged muscle may be of service in relieving pressure.

Case of Oidiomycosis (Blastomycosis) Resembling Giant-celled Sarcoma.

DR. WILLIAM B. COLEY, New York, reported the case of a male, aged 27 years, who was suddenly seized with an attack of severe pain in the lumbar region. Two to three days later he had severe pain in the dorsal region of the left foot, which became markedly swollen and a few days later fluctuation developed. At the end of ten days a small sinus appeared between the great and second toes, from which exuded a dirty, pus-like fluid. A week later a similar lesion developed in the dorsum of the other foot, while in the outer aspect of the right thigh two small flat papillary tumors appeared in the skin itself. These were irregularly circular in shape, depressed in the center, with indurated edges, slightly elevated. They quickly became covered with crusts which, on removal, showed pus-like material in the center. Five to six similar lesions somewhat larger and more protuberant, shortly afterward developed on the face and nose.

Almost simultaneously with the appearance of the skin lesions there developed numerous subcutaneous tumors, widely distributed over the various parts of the body, varying from the size of a hazelnut to that of a small egg. They always began subcutaneously, within the deep layers of the skin, appearing first as smooth, spherical tumors of moderately firm consistence, but slightly elevated above the level of the skin. After a few days they would grow rapidly in size, become much more protuberant and soon begin to show fluctuation. In a few days the entire tumor would seem little more than a thick-walled abscess cavity. If left to themselves they usually ruptured after a wek or ten days, discharging a cream or chocolate-colored material. Coincidentally with the appearance of the first tumors the patient developed a dry, hacking cough, which has persisted up to the present time. Two weeks after the beginning of the symptoms one of the small subcutaneous tumors was removed for microscopic examination. The pathologist pronounced it giant-celled sarcoma. Altogether there were about 20 subcutaneous tumors in different parts of the body in addition to the skin lesions. Pure cultures of the fluid developed the blastomyces. Similar subcutaneous lesions were produced on dogs from pure cultures of the organism. The patient has developed 60 lesions similar to those described throughout the body. He has become greatly emaciated; his temperature sometimes falls as low as 95 F., and he has recently begun to raise a purulent looking sputum in which the organism has been found. He has also had a purulent discharge from the rectum which has, likewise, shown pure cultures of blastomyces.

Multiple Carcinomata Following Chronic Roentgen Ray Dermatitis.

DR. C. A. PORTER and DR. C. J. WHITE, Boston, reviewed 10 cases found in the literature and reported an additional case. They stated that for the atrophic condition of the skin and the telangiectases nothing can be done. Hypertrophic changes, keratoses and warts may, with safety, be treated in the usual manner. If such treatment fails, excision with or without skin grafting, will probably relieve the pain and result in a cure. Excision and grafting will prove to be the best treatment for recurrent fissures. All ulcerations, which, under ordinary treatment, remain open, after three months, should be thoroughly excised, and very carefully examined. The subsequent treatment, to be determined by the result of the microscopic examination, should be skin grafting, further excision and grafting, or amputation. Almost all of these cases of severe and chronic dermatitis date back to early exposure. With the protection which our present knowledge demands, it is to be hoped that the number of victims of too enthusiastic work in an untried field will steadily diminish. In the meantime there is no hesitation in recommending the early excision of all persistent Roentgen ray ulcerations, in order that subsequent malignant degeneration may be prevented.

Brain Surgery.

DR. STEPHEN H. WEEKS, Portland, Maine, stated that operations may be performed for the relief of Jacksonian epilepsy, for the cure of imbecility, for the removal of clots, for the

opening of abscesses, for the excision of tumors, for the relief of intracranial pressure with or without drainage of the lateral ventricles, and for the cure of traumatic insanity.

Dr. Weeks stated that the question of anesthesia in brain operations is a very important one. His experience has been limited to general anesthesia. He has never made use of intraspinal injection of cocain. Shock may be in great part avoided by dividing the operation into two stages, the interval between them being about five days. To avoid septic invasion the less drainage the better, and consequently every effort should be made to close the skin wound as early as possible.

(To be continued.)

Marriages

ALBERT L. HERTEL, M.D., to Miss Lydia E. Nagel, both of St. Louis, Mo., June 5.

PAGE EDMUNDS, M.D., Baltimore, to Miss Millicent Geare of Annapolis, Md., May 30.

ANDREW C. SMITH, M.D., to Miss Anna L. McDonald, both of Portland, Ore., May 27.

BURTON D. PARKER, M.D., to Miss Tilla Louise Swales, both of Detroit, Mich., June 11.

GEORGE B. FOSTER, M.D., Lynn, Mass., to Miss Alice Allen McAuley of Boston, recently.

PORTER NORTON, M.D., Mangum, Okla., to Miss Myat Beauchamp of Bowie, Texas, May 25.

FRANK HYATT RALEY, M.D., to Miss Beatrice Davis, both of Salt Lake City, Utah, June 12.

OSCAR OWRE, M.D., Minneapolis, Minn., to Miss Katherine E. Riis, of New York City, June 5.

ALBERT NICHOLAS BAGGS, M.D., to Miss Aberline McKean Henry, both of Philadelphia, June 5.

GEORGE GREGORY BELDEN, M.D., to Miss Anna Pauline Dunston, both of Spokane, Wash., May 29.

JAMES GAVIN FIELD, M.D., surgeon, U. S. Navy, to Miss Laura Field of Dallas, Texas, May 11.

NICHOLAS HENRY KERN, M.D., Thawville, Ill., to Miss Jennie L. DeSelm of Kankakee, Ill., May 28.

ARTHUR J. GILLETTE, M.D., to Miss Katherine Harvey Kennedy, both of St. Paul, Minn., May 29.

PAUL VINCENT WOOLLEY, M.D., to Miss Meroe Royston Moies, both of Kansas City, Mo., June 5.

EUGENE E. NORTHCUTT, M.D., McMinnville, Tenn., to Miss Sadye Bales of Morristown, Tenn., May 9.

H. BERT ELLIS, M.D., to Mrs. Florence E. Chandler, both of Los Angeles, Cal., at Philadelphia, May 20.

ROBERT G. MCCARTHY, M.D., to Miss Celia S. McAndrews, both of Chicago, at Valparaiso, Ind., June 5.

FRANCIS A. CARMICHAEL, M.D., Goodland, Kan., to Miss Rose May McCloskey of San Antonio, Texas, May 15.

WILLIAM JOHN LE HUNTE LYSTER, M.D., assistant surgeon, U. S. Army, to Miss Alice Chase Bissell, at Detroit, Mich., May 28.

Deaths

Robert Augustine Marmion, M.D. University of Pennsylvania, Philadelphia, 1868; medical director, U. S. N., retired; a member of the American Medical Association and of the Association of Military Surgeons of the United States; who was appointed to the Navy from Pennsylvania in 1868; a member of the Naval Examining and Retiring Boards, and prior to retirement president of the U. S. Naval Medical School, and in charge of the Naval Museum of Hygiene, Washington, D. C., died at the Emergency Hospital in that city, June 8, from cerebral hemorrhage, after an illness of a few hours, aged 62.

Charles E. Swasey, M.D. University of Pennsylvania, Department of Medicine, Philadelphia, 1861; assistant surgeon, U. S. V.; later brevetted colonel, and at the close of the war medical director and medical purveyor of the District of the Frontier, and in charge of the U. S. General Hospital, Little Rock, Ark.; city physician of Somersworth, N. H., for eight years, died at his home in that city, May 30, from cerebral hemorrhage, after an illness of four days, aged 77.

Cornelius Edward Van Horne, M.D. Western Pennsylvania Medical College, Medical Department of Western University, Pittsburg, 1896; a member of the American Medical Association; a member of the medical staff of Passavant Hospital, Pittsburg, and a well-known practitioner of East End, Pittsburg, was found dead near the Exposition Hotel, Conneaut Lake, June 2, supposedly from heart disease, aged 39.

Josephus R. Corbus (Illinois Army Board, 1865); M.D. Charity Hospital Medical College, Cleveland, Ohio, 1866; a veteran of the Civil War; formerly surgeon of the Chicago, Rock Island & Pacific Railroad at La Salle, Ill.; a member of the United States pension examining board at Chicago for several years, died at the home of his son in Chicago, June 8, aged 64.

Leonard Arthur Hines, M.D. Fort Wayne (Ind.) College of Medicine, 1892; of Warsaw, Ind.; a member of the Indiana State Medical Association and Kosciusko County Medical Society, died at Hope Hospital, Fort Wayne, May 29, from intestinal obstruction, due to tuberculosis, for which a surgical operation had been performed three days before, aged 34.

Lloyd Elwin Spear, M.D. University of Michigan, Department of Medicine and Surgery, Ann Arbor, 1869; a member of the American Medical Association; a veteran of the Civil War, and for more than 25 years a resident of Shirley, Ill., died at his home, June 1, from cerebral hemorrhage, after an illness of one year, aged 66.

Nathaniel K. Whittemore, M.D. Bellevue Hospital Medical College, New York City, 1872; a member of the American Medical Association; for several years a member of the local pension board and of the board of education of Elk River, Minn., died May 31, from nephritis, after an illness of six months, aged 59.

Peter J. Weber, M.D. Washington University, Medical Department, St. Louis, 1906; president of the City Hospital Medical Association, St. Louis, and interne at the City Hospital, died May 29 in that institution, from septicemia due to an operation wound, after an illness of five days, aged 30.

Samuel W. Given, M.D. Rush Medical College, Chicago, 1890; a member of the Michigan State and Genesee County medical societies; a member of the school board of Flint, Mich., for eight years, and last year president of the board, died at his home, May 28, from nervous collapse, aged 43.

Robert E. Campbell, M.D. University of Michigan, Department of Medicine and Surgery, Ann Arbor, 1866; for many years a prominent practitioner of Buffalo, N. Y., died at the Park Hotel in that city, May 27, after an illness of three months, from heart disease, aged 65.

Alpheus A. Bush, M.D. Bellevue Hospital Medical College, New York City, 1875; a member of the American Medical Association, and a practitioner of Brushton, Pittsburg, died suddenly at Columbia Hospital in that city, May 30, from angina pectoris, aged 57.

John H. Burchmore, M.D. Harvard University Medical School, Boston, 1875; a member of the Illinois State and Cook County medical societies; for 30 years a practitioner of Evanston, Ill., died suddenly at his home in that city, from heart disease, June 8, aged 57.

M. D. Baldridge, M.D. Medical College of Ohio, Medical Department of the University of Cincinnati, 1844; a pioneer practitioner of Batavia, Iowa, died at his home in that place, June 1, from senile debility, after a long period of invalidism, aged 80.

John W. S. Norris, M.D. Jefferson Medical College, Philadelphia, 1859; surgeon in the Army during the Civil War; formerly of Philadelphia, but of late years a resident of Paris, France, died in that city, May 31, from rheumatic arthritis, aged 69.

Joseph L. Prentiss, M.D. Rush Medical College, Chicago, 1866; surgeon during the Civil War, and for 30 years a practitioner of Canon City, Colo., died at Seattle, Wash., May 31, from heart disease, after a long period of invalidism, aged 65.

Max J. H. Koetter, M.D. University of Nebraska, College of Medicine, Omaha, 1903; a member of the American Medical Association, and secretary of the Burlington (Wyo.) Commercial Club, died at Burlington, February 23, aged 28.

Edwin Franklin Kessler, M.D. Independent Medical College, People's Institute, Chicago, 1897; license, Wisconsin, 1899; is reported to have committed suicide by strangulation in his room in Milwaukee, May 30, aged 52.

Maurice K. Griffin, M.D. Kentucky University, Medical Department, Louisville, 1905; of Ashland, Ky., died May 28, in a hospital at Tampa, Fla., from rheumatic endocarditis, after an illness of five months, aged 25.

James H. Hammond (Act of 1887, Minn.); for more than 20 years a practitioner of Minneapolis, was found dead in his rooms in that city, May 31, aged about 60. Death is thought to have been due to heart disease.

George Boice Durrie, M.D. Medical Institution of Yale College, New Haven, Conn., 1865; a veteran of the Civil War, and for 35 years a practitioner of New York City, died from heart disease at his home, June 1.

John J. Reaburn, M.D. Medical Department, University of Iowa, Keokuk, 1869; a member of the Illinois State and Hancock County medical societies, died at his home in Carthage, Ill., May 28, aged 74.

Joseph C. Bessette, M.D. Harvey Medical College, Chicago, 1899; was found dead in his room in Chicago, June 1, from poison by cyanid of potassium, supposed to have been self-administered, aged 42.

M. J. Kelly, M.B. Toronto University; M.D., LL.B.; for 30 years inspector of Brant County schools, and for a number of years a practitioner of Brantford, Ont., died at Montreal aged 74.

H. W. Thornton, M.D. McGill University Medical Faculty, Montreal, 1882; L.R.C.P. London, 1882; of New Richmond, Que., was recently suffocated in a fire which destroyed his house.

Chester Ira Thacher, M.D. Cleveland (Ohio) Homeopathic Medical College, 1880; of Chicago, died suddenly at the home of his sister-in-law in New York City, May 31, from heart disease.

George P. Young, M.D. Manitoba Medical College, Winnipeg, 1895; formerly of Sandon B. C., but for several years a practitioner of Vancouver, B. C., died suddenly in that city, May 27.

John Garthwaite Pierson, M.D. New York University Medical College, 1874; formerly a practitioner of Southampton, L. I., died at the home of his daughter in Westfield, N. J., May 29.

Charles H. Turner, M.D. Medical School of Harvard University, Boston, 1898; formerly of Holyoke, Haverhill and Blackinton, Mass., died in a hospital in Worcester, May 29.

John Hutchison, M.D. Licentiate Faculty of P. and S., Glasgow, Scotland, 1881; died at his home in Glenfell, Sask., May 5, from pneumonia, after a short illness, aged 54.

George Waterman Mason, M.D. Medical College of Ohio, Medical Department, University of Cincinnati, 1849; died at his home in Stafford, Ohio, April 1, aged 80.

William D. Strother (License, Mo., 1883); a resident of Lee's Summit, Mo., for 30 years, died at his home, April 21, after an illness of several days, aged 80.

George M. Fuerth, M.D. University of Halle, Germany, 1883; a well-known practitioner of Detroit, died suddenly, June 3, at his home, from heart disease, aged 48.

Thaddeus J. Brown, M.D. Beaumont Hospital Medical College, St. Louis, 1898; died from pneumonia, at his home in Novelty, Mo., recently, aged 30.

Louis A. Fecteau, M.D. New York University Medical College, New York City, 1887; died at his home in Natick, R. I., June 2, after a prolonged illness.

Emil Bories, M.D. University of Vermont, College of Medicine, Burlington, 1885; of Seattle, Wash., died in Vancouver, B. C., May 31, aged 54.

Thomas W. Walsh, M.D. Bellevue Hospital Medical College, New York City, 1891; died at his home in Halifax, N. S., May 11, after a long illness.

Henry Tremayne (Years of Practice, Mich., 1900); a resident of Ionia County, Mich., since 1863, died at his home in Ionia, June 3, aged 69.

Colin MacKenzie, M.D. Kansas City (Mo.) Medical College, 1897; of Minneapolis, Minn., died at the Russell Sanitarium, May 18, aged 39.

George Henry Watson (Years of Practice, Mass.); formerly of Bridgewater, Mass., died at his home in Flatbush, N. Y., May 26, aged 59.

Noyes Newton Learned (Years of Practice, Mass., 1894); a native of Vermont, died at his home in Charlestown, Boston, May 11, aged 82.

Christopher C. Thompson (License, La.); a practitioner for about 50 years, died at his home in Ada, Grant Parish, La., April 16, aged 80.

William H. Schildknecht (License, Neb., 1891); a pioneer of Cass County, Neb., died in Plattsmouth, February 21, aged 71.

S. F. Wilson, M.D. McGill University Medical Faculty, Montreal, 1893; of Montreal, died recently, aged 51.

Therapeutics

[It is the aim of this department to aid the general practitioner by giving practical prescriptions and methods of treatment for the diseases seen especially in every-day practice. Contributions will be welcomed from our readers.]

Chronic Gastritis.

Chronic gastritis presents various indications for treatment. The principal of these are: 1. The removal of irritants and protection of the mucous membrane. 2. The restraint of excessive secretion and the neutralization of excessive acidity. 3. The prevention of fermentation. 4. The stimulation of the appetite and the relief of symptoms.

The removal of irritants is best accomplished by lavage, which is particularly indicated if there is any tendency to retention of food. It is customary to add alkalies to the water to dissolve mucus and an antiseptic to help cleanse the stomach. A mixture like the following may be used:

℞. Sodii bicarbonatis 3x 40
Sodii chloridi 3v 20

Sig.: Add one teaspoonful to 2 quarts (2 liters) of water.

The following antiseptics have been recommended:

Acidum salicylicum	gr. vii to water Oi—	1 to 1,000
Thymol	gr. iv to water Oi—	1 to 2,000
Acidum butyricum	gr. xl to water Oi—	6 to 1,000
Resorcinol	gr. xv to xxxv to water Oi—	2-5 to 1,000
Benzol	gr. xxxv to water Oi—	5 to 1,000
Acidum hydrochloricum	m. xxxv to water Oi—	5 to 1,000
Potassii permanganas	gr. ss to water Oi—	0.05 to 1,000

Instead of lavage a suitable mineral water may be drunk freely, the liquid passing into the duodenum and carrying mucus and food remnants with it. Instead of natural mineral waters the various artificial substitutes may be employed. Of these the National Formulary contains a considerable number. The chief salts of value in these waters are the bicarbonates which have a solvent action on mucus, and the sulphates which assist by their laxative effect. These waters are usually indicated in the early stages of gastritis, when there is an excess of acid, and are contraindicated in conditions of low acidity. Waters containing chlorids appear to be serviceable in lessening the toughness of the mucus and are thought to have the power of increasing the secretion of gastric juice. Boas has recommended the following prescription of L. Wolf:

℞. Sodii sulphatis
Sodii chloridi, āā 3i 30
Sodii carbonatis 3vi 24
Sodii boratis 3iiss 10
Potassii sulphatis 3i 4

M. Sig.: Take half a teaspoonful in lukewarm water three times a day, before breakfast and two hours before the midday and evening meals.

Most authors have credited silver nitrate with some power to influence the progress of gastric catarrh. Its action is a purely local one on the mucous membrane and certain conditions are essential to its manifestation. The first is that the stomach should be empty of food, and the second is that the mucous membrane should be clear of its coating of mucus. As the object is to affect the mucous membrane of the stomach, it is much better that the drug should be given in solution so that it may immediately come in contact with the part it is to affect. It should be given before meals, and the best way to apply it is through the tube at the end of lavage by which the food and mucus have been removed. A 1 to 2,000 solution may be used and gradually increased to 1 to 1,000. The solution should be allowed to remain in the stomach for two minutes, after which it may be removed by lavage, and it may be advisable to add some sodium chlorid to the wash water. If lavage is impracticable the drug may be given in pill form or preferably in solution. Rodari gives the following formulas:

℞. Argenti nitratis .....gr. v-vii 3-45
Kaolini q. s. ut. f. pil. No. xxx

Sig.: One pill with half a glass of water three times day, an hour before meals.

℞ Argenti nitratis.....gr. iii-v | 2-3
Aquæ dest.....ʒv 150|

M. detur ad. vitr. nigr. Sig.: Take a tablespoonful three or four times a day, an hour before meals, in half a glass of water.

The treatment with silver nitrate is most appropriate to cases in which there is increased acidity.

Bismuth salts are applicable for their astringent properties. The most appropriate are the subcarbonate, the subnitrate and the subgallate. The subsalicylate is objected to by Rodari on the ground that the salicylic acid injures the stomach more than the bismuth aids it. He recommends the following in acid gastritis:

℞ Bismuthi subnitratis.....ʒiiss 10|
Sodii carbonatis
Magnesii oxidi, ää.....ʒv 20|
Extracti belladonnæ.....gr. ii |15

M. Ft. pulvis. Sig.: Take a level coffee spoonful suspended in half a glass of water, three times a day, two hours before eating.

Reed recommends the combination of silver nitrate, gr. ¼ (0.015) and bismuth subnitrate, 5 to 10 grains (0.3 to 0.6) as occasionally useful.

Alkalies are useful in acid gastritis and in place of the alkaline mineral waters one may employ sodium bicarbonate, magnesium oxid, magna magnesiæ (N. F.), calcium carbonate, or a combination of these. When the bowels are constipated one may give the following:

℞ Sodii bicarbonatis.....ʒx 40|
Magnesii oxidi.....ʒiiss 10|

M. Sig.: Take from half a teaspoonful to a teaspoonful at mealtimes.

If diarrhea is present calcium carbonate may be substituted for the magnesia, or the following may be given:

℞ Bismuthi subnitratis.....ʒiiss 10|
Sodii carbonatis
Magnesii oxidi, ää.....ʒv 20|

M. Ft. pulvis. Sig.: Take a teaspoonful in water three times a day, two hours before meals.

The risk of fermentation of food in uncomplicated gastritis is not great. It is probable that antiseptics introduced into the stomach are not particularly useful. It is more rational to sterilize the food and disinfect the mouth. The following combinations are recommended by Hemmeter for disinfection of the mouth. They should be applied by the brush to the teeth and the roof of the tongue, and also used as a mouth wash:

℞ Thymol.....gr. iv |25
Acidi benzoici.....gr. xlv 3|
Tincturæ eucalypti.....fʒiiiss 15|
Alcohol.....fʒiiiss 100|
Olei menthæ pip.....m. xii |75

M. Sig.: Pour sufficient into one-half a glass of water to produce turbidity. If much decomposition be present, 0.8 hydrargyri chloridum corrosivum may be added.

℞ Spiritus lavandulæ
Spiritus myrciæ, ää.....fʒxiiss 50|
Tincturæ myrrhæ.....fʒi 4|
Benzosulphinidi (saccharin)
Menthol, ää.....gr. xv 1|

M. Sig.: From one-half to one teaspoonful to a glass of water.

Resorcinol is commonly regarded as one of the best gastric antiseptics. It may be given in doses of from 2 to 5 grains.

℞ Resorcinol.....gr. iss |1
Benzosulphinidi.....gr. ss |03

M. Sig.: One powder three times a day, half an hour before eating.

Resorcinol may be combined with stomachics thus:

℞ Resorcinol.....gr. xxx 2|
Acidi hydrochlorici dil.
Fluidextracti condurango, ää.....fʒiiss 10|

M. Sig.: From 20 to 30 drops half an hour before meals (Rodari).

The relative value of some gastric antiseptics is given as follows: Sodium salicylate stops fermentation in a concentration of less than ⅛ per cent; thymol, between ⅛ and ½ per cent.; mentnol, between ½ and 2 per cent.; ichthyol at 1 per cent.

Thymol may be given as follows:

℞ Thymol.....gr. xv 1|
Alcohol.....fʒiiss 10|
Benzosulphinidi.....gr. iss |1

M. Sig.: Take 10 drops half an hour before or after the meal. Or:

℞ Thymol.....gr. xv 1|
Extracti gentianæ q. s. ut. ft. pil. No. xx

Sig.: Take one or two pills before meals. Or:

℞ Thymol
Resorcinol, ää.....gr. xii |75
Extracti gentianæ q. s. ut. ft. pil. No. xx

Sig.: One or two pills before meals.

Menthol may be given as follows:

℞ Menthol.....gr. xv 1|
Thymol.....gr. v |3
Alcohol
Syrupi, ää.....fʒi 30|

Sig.: Take a teaspoonful before meals.

If we consider the proportions in which these substances exert an antiseptic action, it is manifestly unreasonable to expect them to act on a mass of food. In the proportion given we would need to take of thymol 2 grains or of menthol 8 grains to disinfect an ordinary meal (1 liter or one quart of food). These are quantities larger than should be given.

The best gastric antiseptic is hydrochloric acid. It may be given in large doses after meals.

℞ Acidi hydrochlorici dil.....fʒi 30|
Syrupi zingiberis q. s. ad.....fʒiv 120|

Sig.: Take a teaspoonful in half a glass of water after meals.

The acids may be given with other stomachics before meals with a view to exciting appetite.

℞ Acidi hydrochlorici dil.....fʒiiss 10|
Tincturæ cinchonæ comp.....fʒiv 15|
Syrupi rubi.....fʒi 30|
Aquæ q. s. ad.....fʒiv 120|

M. Sig.: Take a teaspoonful in water before eating.

Hemmeter recommends the following:

℞ Strychninæ sulphatis.....gr. 1/3 |02
Acidi hydrochlorici dil.....fʒv 20|
Elixir gentianæ.....fʒvi 180|

M. Sig.: A tablespoonful in two ounces of water after meals, through a glass tube.

Condurango is highly esteemed by many as a stomachic.

℞ Fluidextracti condurango.....ʒiss 45|
Elixir gentianæ
Glycerini, ää.....fʒviii 240|

M. Sig.: Take one to two teaspoonfuls before meals.

Hare recommends as a tonic:

℞ Acidi hydrochlorici dil.....fʒss 15|
Tincturæ cinchonæ comp.....fʒvi 180|

M. Sig.: Take a dessertspoonful three times a day, after meals, well diluted with water.

For pyrosis, silver nitrate is the best remedy. Nausea is relieved, according to Boardman Reed, by diet and lavage, but when this is impracticable minute doses of calomel and ipecac may be given. He recommends the following:

℞ Bismuthi subnitratis.....ʒi 4|
Glyceriti phenolis.....ʒss 2|
Spiritus chloroformi
Tincturæ cardamomi comp., ää.....fʒiss 6|
Aquæ menthæ pip. q. s. ad.....fʒii 60|

M. Sig.: One teaspoonful in water or lime water every two hours until relieved.

Extremely advanced chronic gastritis affords an opportunity for the use of digestive agents. The most commonly used is pepsin, but given alone it is ineffective and it is usually superfluous, since if hydrochloric acid be given, sufficient pepsin will be secreted by the gastric glands in the majority of cases. If

given at all, it should be in combination with hydrochloric acid, as in the following examples:

℞. Acidi hydrochlorici dil.....f℥i 30
Pepsini .....ʒss 2
Aquæ q. s. ad.....ʒiv 120
M. Sig.: Take a teaspoonful in two ounces of water, half an hour, one hour and an hour and a half after meals.

℞. Acidi hydrochlorici dil.....f℥iv 15
Liquoris pepsini q. s. ad.....ʒiv 120
M. Sig.: Take two teaspoonfuls in water after meals.

Such large doses of hydrochloric acid are necessary to render the pepsin active, that it is impracticable to use it. In case of total lack of acid in the gastric juice, pancreatin may be given guarded by alkali to insure an alkaline medium.

Thus one may give:

℞. Pancreatini .....ʒii 8
Sodii bicarbonatis .....ʒi 30
M. et. ft. pulveres No. xxiv
Sig.: Take one powder after each meal.

Preservation of the Teeth in Pregnancy.

Barton C. Hirst, in the *Therapeutic Gazette*, states that in order to preserve the teeth the pregnant woman should use milk of magnesia as a mouth wash morning and evening, and take a course of syrup of lactophosphate of calcium, 2 drams (8.0) three times a day, for two weeks at a time, off and on during the whole period of gestation.

Medicolegal

Liability of Father Calling Physician for Adult Son—Fees Which May be Charged—Neither Wealth of Patient Nor Reputation of Physician to be Considered.

The Supreme Court of Missouri, Division No. 1, recently passed on the case of M. P. Morrell vs. Joseph J. Lawrence. The plaintiff sued on an alleged implied contract of the defendant to pay him the reasonable value of his services as a physician rendered to the defendant's adult son at the defendant's request. The facts were as follows: The defendant and his son, Frank Lawrence,, both former residents of St. Louis, were at the time in question living in New York City. The son, 42 years of age, was not living with his father, but at a hotel. He was a man of considerable means, carrying on a business of his own. The plaintiff was a physician residing in St. Louis. While the defendant and his son resided in that city the latter became in bad health and came under the care of the plaintiff. The relation of physician and patient had existed between them for several years. The plaintiff's bills for medical services rendered in St. Louis to Frank Lawrence were presented to and paid by him.

When the services in controversy were rendered the plaintiff received a telegram from the defendant in the following words: "Frank is quite sick. We would like to have you come and treat him. Leave on noon train Sunday, via Big Four. Answer at once." The plaintiff answered: "Will leave on Big Four at noon to-day." When he arrived in New York he was met at the station by a messenger of the defendant, conducted to the latter's residence, and after tea was conducted to the hotel where Frank Lawrence lay very ill. The plaintiff remained in constant attendance on the sick man, ministering to him day and night, until he died. The particular character of the services rendered was in evidence, and there was testimony on the part of the plaintiff tending to show that the services were worth $300, $400, $500 and $1,000 a day. The amount of the bill sued for was $16,000, itemized at $400 a day for forty days. The evidence on the part of the defendant was that from $4,000 to $6,000 would be ample pay for the services rendered. The verdict was for the plaintiff for $12,666. The trial court, however, sustained the defendant's motion for a new trial, on the ground of error in the instructions, and that the verdict was excessive. That order is affirmed by the Supreme Court.

1. The Supreme Court says that, before reaching the points on which the trial court based its ruling, the point first presented in the brief for the defendant must be considered; that is, that the plaintiff made out no case to go to the jury. The defendant's proposition was that from the facts and circumstances shown by the plaintiff's evidence, the law implied no promise or obligation on the part of the defendant to pay for the services rendered. There was no express contract on the part of the defendant shown; if he was liable, it was on an implied contract. According to the defendant's estimate of the evidence, there was shown a request by the defendant of the plaintiff to render services for the benefit of another, and nothing more.

From certain decisions cited counsel drew the conclusion that a promise to pay the bill is not implied from the fact that a father calls a physician to attend his sick son, who is a man of mature age, and to that extent this court thinks the conclusion justified; but it does not go with counsel to the extent of holding that a father calling a physician to attend his adult son can be rendered liable only on an express contract, because it holds that the circumstances or conditions may be such as to lead the physician to believe, and to charge the father with knowledge that the physician does believe, that the father is undertaking to pay for the services to be rendered. Whilst the calling of a physician to the bedside of a sick man has in the nature of the case its own elements of exception to the general rule, yet it is not put so far in a class to itself as to exempt it entirely from the category of implied contracts.

The court thinks the evidence for the plaintiff in this case tended to prove a condition of affairs from which the triers of the fact, if they should see fit to draw the inference, might with reason do so, that the defendant intended the plaintiff to understand, and the plaintiff did understand, that he would pay for the services which the telegram called the plaintiff to render. This was not a call on the plaintiff for services in the field of his daily work. It called him away from his established field of action. It called him, in effect, to resign his practice, to dedicate himself for the time being solely to the service of the defendant's son, whatever the consequence might be to his general practice. This was altogether outside of the category of the cases above referred to. The patient was not one of twenty or more for whom the physician might prescribe in a day. He was one for whom the physician must give up all other patients. The call was a very unusual one and it involved unusual financial consequences.

There was no room to question at least one fact; that is, that the plaintiff went to New York and entered on this service at the request of the defendant. The telegram was not couched in form of a message from the sick man. The writer was not in the character of the conveyor of a request from another, and did not assume to express merely another's wish, or merely make the announcement that there was a sick man there needing attention. He expressed his own desire, uniting his own with that of his son, or possibly of some other member of the family, under the first person plural of the pronoun: "Frank is quite sick. We would like to have you come and treat him. Leave on noon train Sunday, via Big Four. Answer at once." If the plaintiff's testimony gave the correct version of the controversy or misunderstanding as to the defendant's liability for the services rendered on the trip to Europe, the defendant should have known that the plaintiff would understand that telegram as carrying by implication a promise to pay, or at least that he was liable to put that construction on it. The telegram was to be interpreted in the light of the relation of the parties and of their past transactions with each other. Whether in that light the defendant had reason to believe that the plaintiff would understand the telegram to imply an agreement to pay, and the plaintiff did so understand, were questions for the jury under proper instructions, and, if the jury should so find, the verdict should be for the plaintiff.

2. It was shown in evidence, over the objection of the defendant, that he was a very wealthy man, and on the measure of damages the trial court in its instructions authorized the jury to take that fact into account. The instructions covering that point were as follows: "2. In determining what is the reasonable value of the services rendered by the plaintiff,

the jury should take into account the circumstances and conditions under which the services were rendered; the length of time employed; the professional character and standing of the plaintiff; the absence of plaintiff from his residence and place of business; the nature of the ailment of the patient; the nature of the services themselves; the danger, if any, of infection or contagion incident thereto; the professional skill and experience required for their proper rendition; the ability of the person liable therefor to pay; together with all other facts and circumstances shown in evidence, relative to such services; and, having considered all such facts and circumstances, the jury should fix the value of the services at such an amount as under all the evidence they believe to be reasonable and proper. 3. The jury are instructed that the evidence touching the financial ability of the defendant may be considered by the jury, not to enhance the fees above a reasonable compensation, but solely to determine whether the defendant if they find, under the other instructions, he is liable at all, is able to pay a fair and just and reasonable compensation for the services rendered to his son." The trial court sustained the defendant's motion for a new trial on the ground partly that those instructions were erroneous. In that ruling that court was correct.

This court was referred to some decisions as sustaining the proposition that the fact that a man is amply able to respond to a judgment for a debt sued for is one to be taken into account in determining the amount to be awarded against him; but, to the extent that those cases so hold, it does not agree with them.

Ward vs. Kohn, 58 Fed. 462, was cited. There the court commented on the well-known practice in the legal profession of charging a poor man less for legal services rendered than those services are worth, and, on the other hand, of charging a wealthy client a full, fair and reasonable compensation.

That is to say, in estimating the value of the services, the jury should not take for a standard of measurement the fees a lawyer would charge a poor man, in consideration of his poverty, but should estimate the services at their full, fair value.

That is sound doctrine, as far as it goes; but it does not authorize the plaintiff to show to the jury the defendant's wealth as an element, to be taken into the account in the measurement of the value of the services, unless it is in rebuttal of evidence from the other side attempting to show the custom of a lower standard.

In the case at bar there was no effort on the part of the defendant to prove that the plaintiff or other physicians were in the habit of charging smaller fees for like services. Hence there was no occasion for rebuttal evidence to show that smaller fees were charged out of consideration for the poverty of the patients, and that the defendant's financial condition did not entitle him to that indulgence. The instruction justified the jury in believing that there was a difference between the reasonable value of services rendered a rich man and those of the same kind rendered a poor man. There is no such difference.

3. Over the defendant's objection, testimony went in to show that the plaintiff was a physician of good reputation in the community, and instruction authorized the jury, in assessing the value of the services, to take that fact into account. That was error. The plaintiff's general professional reputation was not drawn in question, and the jury had no right to consider it in estimating the value of the services. The plaintiff's professional reputation in the community would doubtless have some influence on the amount of income derived from his practice, and if that was in dispute, and if he was suing for loss of income caused by absence from home in the service of the defendant, evidence of that reputation would be admissible. But there was no question of that kind in the case. The plaintiff testified that his income was $6,000 to $10,000 a year, and there was no dispute of that. Besides, he was not suing for compensation for loss of income occasioned by absence from home in the service of the defendant. His petition was short and to the point. In it he said that, at the request of the defendant, he rendered professional services to the defendant's son, and that the services rendered were reasonably worth $16,000. It was the value of the services alone that he sued to recover. It was competent for the plaintiff to show that he was a physician of learning and skill, and that fact should be taken as an element in estimating the value of the services rendered; but the plaintiff's general reputation as a physician had no more to do with the case than his general reputation as a man.

4. The trial court excluded evidence offered by the defendant to show that the defendant's son, Frank Lawrence, was a man of considerable fortune and amply able to pay for the services. It was error to exclude that testimony. The testimony showed that the plaintiff, the defendant and the defendant's son were well acquainted with each other. The plaintiff knew in a general way the financial standing of the father and the son. If it had been the fact that the son was impecunious, and the plaintiff knew it, and the defendant knew that the plaintiff knew it, would not that fact have naturally influenced the plaintiff in drawing the inference that the defendant intended to pay for the services he called him to perform? And, on the other hand, if it was known to both parties that the son was himself a man of considerable wealth, would that not naturally render the inference less violent? It was a fact by no means conclusive, but it was one of the many facts in the case to be taken into account and given such weight as the jury should see fit to give it.

5. The trial court also assigned as a reason for granting the new trial that the verdict was excessive. That was a point peculiarly within the province of the trial judge. It was one that he was better qualified to judge than an appellate court. The law puts that important responsibility on him, and it advances the cause of justice when the trial judge courageously performs that duty. The Supreme Court sees nothing calling for a review of the ruling of the trial court on this point.

Current Medical Literature

AMERICAN.

Titles marked with an asterisk (*) are abstracted below.

Boston Medical and Surgical Journal.

May 30.

1 *Gallstones Without Symptoms and Symptoms Without Gallstones. M. H. Richardson, Boston.
2 *Use of Tuberculin in the Early Diagnosis of Tuberculosis. J. B. Hawes and C. Floyd, Boston.
3 Submucous Resection of the Nasal Septum. G. H. Powers, Jr., Boston.
4 Vocal Nodules in Children. A. Coolidge, Jr., Boston.
5 Prophylaxis of Postoperative Diphtheria. H. A. Barnes, Boston.
6 Submucous Resection of the Nasal Septum. G. L. Tobey, Jr., Boston.
7 Fatal Meningitis After Removal of Anterior End of Middle Turbinate. H. P. Mosher, Boston.
8 Fatal Result from Intranasal Operation. G. L. Tobey, Jr., Boston.

1. **Gallstones and Their Symptoms.**—Richardson calls attention to the large number of apparently incorrect diagnoses of gallstone, in which all classical symptoms seem to be present, and yet, on opening the gall bladder, no gallstones are found. An abnormal condition of the gall bladder inviting infection, causing colic, and in his belief, making the gall bladder the nidus of future gallstones are the conditions present. Richardson holds that the only error in such cases is in limiting the cause of symptoms to an actual crystalline formation. On the other hand, the absence of gallstone pain and discomfort in the patient's history must not be given too much weight in eliminating gallstones from the diagnosis. He believes gallstones may exist and may cause serious anatomic lesions with few, if any, symptoms of pain or any of its manifestations. He believes also that the right upper quadrant of the abdomen is a field far from satisfactorily explored and understood.

2. **Tuberculin in Early Diagnosis of Tuberculosis.**—From the study of a number of cases Hawes and Floyd, who report in detail thirty-seven cases, reach the following conclusions: 1. Tuberculin is an agent of great value in the early diagnosis of tuberculosis. 2. It should be used only as a last resort. 3. It should be used only in carefully selected cases. 4. It should be given by men trained and qualified to do the work.

5. When so used, in an initial dose of not over 0.1 mg. it is not in any way dangerous.

New York Medical Journal.
June 1.

9 Morphologic Diagnosis of Pathogenic Protozoa. J. Ewing, New York.
10 *Acute Unilateral Septic Infarcts of Kidney. G. E. Brewer, New York.
11 Pyocyaneous Ulcer of Cornea. P. Fridenberg, New York.
12 *Diagnosis of Tumors of the Bladder. H. Cabot, Boston.
13 Eyestrain in School Children. W. S. Cornell, Philadelphia.
14 The Scranton Typhoid Epidemic. J. M. Walnwright, Scranton, Pa.
15 Modern Methods of Improving Milk Supplies of Cities. C. B. Lane, Washington.
16 *A New Saccharimeter. L. E. Walbum, Copenhagen, Denmark.

10. **Acute Unilateral Septic Infarcts of Kidney.**—Brewer gives a brief history of thirteen cases of this disease, variously treated. As diagnostic points he states that toxemia is marked from the first and with the high fever may suggest lobar pneumonia, or one of exanthemata. Tenderness and muscular rigidity over the region of the appendix or gall bladder often leads one to believe these organs to be the seat of the disease. As the urine from the infected kidney is greatly diminished and largely diluted by the abundant secretion from the unaffected kidney, urinalysis frequently fails as a diagnostic element. Urine examination, therefore, should be more than ordinarily thorough. One pathognomonic sign, which Brewer claims is present in all cases, is a marked unilateral costovertebral tenderness. His own statistics show that with nephrotomy and drainage, in five patients having the severe type, all died. With nephrectomy, performed on eight patients having the severe type, all recovered. Nephrectomy decapsulation and drainage in five patients having the milder type all recovered. Expectant treatment in four or more patients having the mildest type all recovered.

12. **Diagnosis of Bladder Tumor.**—Failure to take advantage of well-known diagnostic methods, Cabot believes to be the cause of fatally late diagnoses of bladder tumors. He urges all practitioners in the presence of painless hematuria, hematuria accompanied by pain which may seem to localize it elsewhere, or in cases of disturbance of bladder function of doubtful origin, to make use of the cystoscope.

16. **A New Saccharimeter.**—Walbum describes an easy and quick way of making a quantitative determination of sugar in the urine. The apparatus consists of a graduated tube, two dropping bottles and a pipette. The method is based on the decolorization of Fehling's solution. The results, for clinical purposes, are said to be approximately accurate.

Medical Record, New York.
June 1.

17 *Physiologic Action of Pancreatic Enzymes. M. A. Cleaves, New York.
18 *Eyestrain and Other Diseases Due to Crossing, Crowding and Damming of Retinal Vessels. G. M. Gould, Philadelphia.
19 *Acid Intoxication or Acidosis. E. S. Talbot, Chicago.
20 Intestinal Obstruction Due to Persistence and Anomaly of Urachus. A. Fanoni, New York.
21 Roentgen Ray as Applied to Prostatic Enlargement. L. B. Bangs, New York.

17. **Physiologic Action of the Pancreatic Enzymes.**—Cleaves divides her cases into those of intestinal surgical interference, postoperative and inoperable cases, metastases and non-malignant cases. The preparations used are prepared from the fresh pancreas, and contain trypsin and amylopsin. They are used hypodermatically by preference, by injection into the subcutaneous tissues, or directly into the growth, or by rectum and by mouth. The pathologic condition and the condition of the kidneys determine the dose. The poisonous symptoms sometimes produced by the trypsin are controlled by the amylopsin. Pain, she states, is relieved, discharge and odor are lessened, metabolism is improved, and mental and physical vigor are increased. The growth in some instances is absorbed.

18. **Eyestrain Due to Damming of Retinal Vessels.**—Vision depends primarily, Gould says, on the vascularization and nutrition of the intraocular tissues. The stability of the globe is determined by the intraocular pressure. The arterial circulation will be impeded if the larger vessels circle around or cross each other, and the nutrition of the retina thus will be impaired. Vision is seriously disturbed and eyestrain follows the damming of the vessel supplying the macula or the region near the macula.

19. **Acidosis.**—The abnormal degree of urinary acidity results, according to Talbot, in colds, headache, backache and important lesions during pregnancy. Pyorrhea alveolaris, he believes, is the result of faulty nutrition, kindred to acidity. Lessened blood alkalinity sets up inflammation of the coats of the arterioles and ends in arteriosclerosis and nerve degeneration. In the eruptive diseases, pneumonia and typhoid, a high degree of acidity has been shown to exist.

Lancet-Clinic, Cincinnati.
June 1.

22 *Multiple Pregnancy. J. W. Rowe, Cincinnati.
23 Pubiotomy and Its Relative Indications. E. B. Montgomery, Quincy, Ill.
24 *Secret Commissions. E. S. McKee, Cincinnati.

22. **Multiple Pregnancy.**—Rowe discusses the causes and gives what he terms the certain and uncertain signs of this condition. He holds that the human female being uniparous, multiple pregnancy must be regarded as pathologic. The maternal mortality is four times as high as in single births, and the commonness of abnormal presentations increases the danger of sepsis.

24. **Secret Commissions.**—McKee deprecates the frequency with which commissions are taken and given by physicians. Tribute, he claims, has been laid on the pharmacist by physicians. Sanitaria, mineral springs and proprietary medicine companies frequently offer physicians shares of stock for the business sent them. He cites some specific cases.

St. Louis Medical Review.
May 25.

25 Value of Opsonic Index in Diagnosis and Treatment of Tuberculosis. O. H. Brown, St. Louis.
26 Drunkenness as Depicted in Ancient Writers. A. Rose, New York.

Annals of Surgery, Philadelphia.
May.

27 *Severe Burn of Top of Head. W. W. Keen, Philadelphia.
28 *Surgical Treatment of Trifacial Neuralgia. F. Martin, Baltimore.
29 *Case of Hemophilic Knee Joint. J. T. Rugh, Philadelphia.
30 *Stab Wounds of the Heart. R. H. Harte, Philadelphia.
31 *Hernia of the Stomach Through the Diaphragm into the Thorax. G. S. Gordon, Phoenix, British Columbia.
32 *Carcinoma of Cardiac End of the Stomach. G. McConnell, St. Louis.
33 *Review of Series of Operations on the Stomach. G. E. Brewer, New York.
34 *Lesions Associated with Gunshot Wounds of the Stomach. W. Martin, New York.
35 *Duodenal Fistula: Its Treatment by Gastrojejunostomy and Pyloric Occlusion. A. A. Berg, New York.
36 *Ileocecal Intussusception Due to Myoadenoma of the Ileum. M. Salzer, Cincinnati, Ohio.
37 *Surgical Treatment of Splanchnoptosis. B. B. Davis, Omaha, Neb.

27. **Severe Burn of Top of Head.**—Keen reports the case of a boy 14 years of age, who, when seven months old, sustained a severe burn of the top of the head. Six months later the whole top of the head sloughed off, including a large portion of both frontal bones, the two parietal bones in their entirety, and a part of the squamous portion of the right temporal bone. A year after the burn the scalp was healed, and a tin cap covered with silk was recommended for protecting the top of the head from blows, but could not be used, as it annoyed the child. Since then the scar has been alternately healed and opened. Soon after the accident the boy had convulsions, then distinct epileptic attacks, and these have continued ever since, increasing in severity and frequency. They occur at any time regardless of any known influence, and number about 400 a year. The boy was very bright and had an excellent memory until he was about 11 years old, when his epileptic attacks became more frequent, and he became stupid. There was no localization of the convulsions. Keen did a complete linear subcutaneous craniotomy so as to separate the entire top of the skull from the lower portion, making eight incisions. The epileptic attacks became lessened in frequency and the boy's intelligence appears to be returning gradually.

28. **Surgery of Trifacial Neuralgia.**—Martin reports eight cases of trifacial neuralgia in which he did a resection of the Gasserian ganglion. In six cases there was complete recovery, there being no recurrence of the pain. Two patients died, one from shock, the other from pneumonia.

29. **Hemophilic Knee Joint.**—Rugh reports a case of this kind, occurring in a man 22 years of age. His family history was negative. Previous to his last illness the patient had had several severe hemorrhages following slight injuries. He had suffered constantly from pain and soreness in his left knee, the result of a fall. The knee would become tender on slight provocation and finally it became so swollen as to impair function. Other measures failing to give relief, the joint was opened and the necessary surgical work was done. In spite of everything that could be done the bleeding from the wound was profuse; when the dressings were changed and the stitches removed. The patient was given gelatin and adrenalin solution internally; an interrupted plaster splint was applied, but constant bleeding was present. Finally, thyroid extract, in 5-grain doses, three times daily, was begun and immediate benefit resulted. Within a week the bleeding had ceased entirely, and the patient's recovery from then on was speedy.

30. **Stab Wounds of Heart.**—Harte reports a case of stab wound of the heart in which an incision in the left auricle one-half inch in length was sutured successfully. The third day after the operation the patient's general condition was good. On the following day there was evidence of infection in the chest. In spite of prompt measures taken to remove the infection, the patient died about twenty-four days after the injury. The autopsy showed an empyema of the left chest and bronchopneumonia. There were extensive pericardial adhesions, with no sign of the stab wound. The endocardium and valves were healthy.

31. **Hernia of Stomach Through Diaphragm.**—Gordon's patient was 31 years of age. He was stabbed in the left flank and two years afterward began to suffer from symptoms referred to a weak stomach. The entire stomach was within the thoracic cavity; it was greatly dilated and hour-glass in form. The hernia was reduced and a gastrojejunostomy was done, but the patient died.

32. **Carcinoma of Stomach.**—McConnell reports a case of primary carcinoma of the cardiac end of the stomach, in which the stomach was much contracted, and displaced so greatly to the left side that the pylorus was to the left of the midline.

33. **Operations on Stomach.**—Brewer reports on seventeen cases in which operation was done, because of a supposed chronic gastric ulcer, or benign pylorus stenosis. He divides these cases into two groups of twelve and five respectively. In the first group eleven patients recovered and were immediately relieved of their symptoms, and one patient died on the sixth day, from pneumonia. Of the eleven, nine are known to have remained well, one died after six months, and one other continues to suffer. Of the second group, five cases in which no lesion was found at operation, one patient was immediately relieved of an hysterical pseudo-tetany, one died from persistent vomiting, one continued to suffer from the gastric crises of locomotor ataxia, and two patients suffered from what was considered a gastric neurosis. Brewer says that he has had no reason to change his belief, enunciated a year ago, as to the indications for treatment in benign lesions of the stomach.

34. **Gunshot Wounds of Stomach.**—Martin makes a very careful analysis of twenty-five reported cases of gunshot wounds of the stomach, and adds three cases to the list.

35. **Duodenal Fistula.**—Berg reports a case, which proves conclusively that when the pylorus is patent a gastrojejunostomy will not divert the chyme from the duodenum into the jejunum, and that when we have to do with a duodenal fistula it is necessary not only to establish a gastrojejunostomy, but also to occlude the pylorus. He does this by means of a broad band of tape held in position by silk ligatures, the knot of the latter resting on the tape.

36. **Ileocecal Intussusception.**—Salzer's patient was 16 years old. She was seized suddenly with severe cramps, but did not vomit, nor was she nauseated. The patient complained of constant pain over the whole abdomen, with acute exacerbations of a colicky character, which were not localized. A swelling was typical and palpable in the region of the cecum. An operation disclosed an ileocecal intussusception, evidently caused by a pedunculated myoadenoma of the ileum. The tumor was about half again as large as a hazelnut.

37.—See abstract in THE JOURNAL, Sept. 15, 1906, page 884.

American Journal of Medical Sciences, Philadelphia.

May.

38 *Diagnosis and Treatment of Cardiac Degeneration Apart from Valvular Disease. R. H. Babcock, Chicago.
39 *A Proper Shoe as an Aid to Treatment in Flat (or Weakened) Feet. J. M. Berry, Troy, N. Y.
40 *Treatment of Compressed Air (Caisson) Illness. H. H. Pelton, New York.
41 *Study of Five Hundred Cases of Pleurisy. F. Fraley, Philadelphia.
42 Relation of Kidneys to Gastroenterology. A. L. Benedict, Buffalo.
43 *Heart Block (Adams-Stokes Disease). G. R. Butler, New York.
44 *Position of Motor Areas of the Human Cortex. H. C. Gordinier, Albany.
45 Pathology of Refrigeration Facial Palsy. L. P. Clark, New York.
46 *Changes Produced in Kidneys by Roentgen Irradiation. A. S. Warthin, Ann Arbor, Mich.
47 Pathogenesis of Reflexes Apropos of a Case of Tuberculoma of the Spinal Meninges. A. Gordon, Philadelphia.
48 *Sclerome of Larynx. E. Mayer, New York.
49 Heredity of Form as Illustrated in Pathology by Study of Cysts of Middle Turbinated Bone. J. Wright, New York.
50 Occurrence of Neoplasms in Wild Mammals. H. Brooks, New York.

38. **Cardiac Degeneration.**—Babcock divides myocardial degeneration into two classes: 1, Cases in which the diagnosis is comparatively easy and certain; 2, cases in which the diagnosis must be made by exclusion or inference. The symptoms of both these classes are discussed fully, as is also the treatment. The author's views are so well known that it is not necessary to repeat them in an abstract.

39. **Treatment of Flat Feet.**—Berry describes the Sampson last and shoe, which is so constructed that the line of body weight projected on from the middle line of the leg and ankle falls over the center of the last. Berry says that a proper shoe should have a low heel, with little or no spring to the sole, thus allowing the toes to come to the ground. They should be broad enough in the ball of the foot to give full play to the weight-bearing portion. The shank should be to the outer side of the shoe, where the weight of the foot comes, instead of in the middle, as in the ordinary shoe. The front part of the shoe should have the same angle of adduction as is normal to the individual foot.

40. **Caisson Disease.**—Pelton says that in the treatment of all types of compressed air illness the patient must be subjected to the further influence of compressed air. For this purpose so-called hospital locks should be provided. Pelton describes the apparatus and its use.

41. **Pleurisy.**—As the result of a thorough study of 500 cases of pleurisy Fraley formulates the following conclusions: 1. Pleurisy occurs at all ages, but most frequently from 20 to 30. 2. Pleurisy is most frequent in the spring and least in the fall. 3. Pleurisy affects children under 15 with equal frequency for boys and girls, but is four times as frequent in men as in women. 4. The colored race is particularly susceptible. 5. Occupation seems to have a decided predisposing effect. 6. Croupous pneumonia is the most frequent cause of empyema, and bronchitis or simple exposure to dampness and cold, seems to be more frequently the exciting cause of pleurisy than tuberculosis or rheumatism (as far as clinical evidence is found). 7. Complications are frequent in hospital practice. 8. Aspiration shortens appreciably the course of the disease, and usually requires to be performed at once to effect a cure. 9. Examination of the blood is but moderately helpful and of doubtful value, as also are cytodiagnosis and inoscopy. 10. Empyema is always dangerous, and its natural course almost invariably fatal. Resection and free drainage constitute the proper method of treatment.

43. **Heart Block.**—Butler reports a fatal case in which it was possible to hear faint fluttering sounds over the third interspace to the left of the sternum, which sounds were distinctly synchronous with the visible auricular pulsations. The bundle of His was infiltrated with fat, and had undergone fatty degeneration to such an extent that it was atrophied to not more than one-fifth of its normal size.

44. Motor Areas of Human Cortex.—From a careful study of his own cases and others collected from the literature, Gordinier concludes that there is a determined area in the cerebral cortex presiding over motor functions, and that area is a precentral convolution and its paracentral annex.

46.—See abstract in THE JOURNAL, Sept. 15, 1906, page 889.

48. Scleroma of Larynx.—Mayer states that scleroma of the larynx is a chronic incurable affection, contagious to a certain degree. Therefore, the subjects of this disease should not be admitted to this country, and every patient with long-standing hoarseness, with or without dyspnea, especially when associated with chronic catarrhal conditions, should be detained until such time as some expert authority can determine the presence or absence of scleroma.

Annals of Ophthalmology, St. Louis.

January.

51 Intravenous Injections. A. Darier, Paris, France.
52 *Ocular Complications of Mumps. J. H. Woodward, New York.
53 Bilateral Metastatic Ophthalmitis in Puerperal Pyemia. G. E. de Schweinitz, Philadelphia.
54 Fundus Lesions with Normal Vision. J. F. Burkholder, Chicago.
55 *Unusual Ocular Manifestations of Gonorrhea. W. C. Posey, Philadelphia.
56 Two Cases of Parinaud's Conjunctivitis. F. Krauss, Philadelphia.
57 Ocular Symptoms in Case of Tumor of Pituitary Body. H. F. Hansell, Philadelphia.
58 Conjugate Palsy of Upward and Downward Movements of Eyes. C. E. G. Shannon, Philadelphia.
59 Modified Paquelin Cautery for Ophthalmic Use. E. B. Coburn, New York.

52. Ocular Complications of Mumps.—Among the ocular complications of mumps Woodward mentions the following: Optic neuritis and neuroretinitis; optic atrophy; iritis; keratitis; conjunctivitis; dacryoadenitis; iridocyclitis; abscess of eyelid; paralysis of accommodation and of the extraocular muscles; narrowing of fields of vision and of color fields, and dimness of vision. Appended to the article is a complete bibliography of the ocular complications of mumps.

55. Unusual Ocular Manifestations of Gonorrhea.—Posey reports several cases of gonorrheal conjunctivitis, one of which was a metastatic conjunctivitis and not a direct infection.

The Laryngoscope, St. Louis.

April.

60 Importance of Early Diagnosis of Malignant Disease of Larynx. O. J. Stein, Chicago.
61 *Rapid Convalescence After Mastoid Operations. W. S. Bryant, New York.
62 *Mastoid Blood Clot Operation. H. G. Langworthy, Dubuque, Iowa.
63 Intranasal Drainage of Frontal Sinus. E. F. Ingals, Chicago.
64 Prof. Gustav Killian and His Work. W. E. Chenery, Boston.
65 Case of Lateral Sinus and Jugular Thrombosis with Abscess Development in Neck. J. J. Thompson, New York.
66 *Cystic Polyp. J. H. Abraham, New York.
67 Case of Laryngeal Urticaria. C. E. Cooper, Denver, Colo.
68 A Guarded Burr for Septal Resection. R. H. Brown, Chicago.
69 Reinforced Freer-Grünwald Forceps and New Patterns of Elevators and Retractors for Submucous Resection of Nasal Septum. O. T. Freer, Chicago.
70 Safest Method of Using Paraffin Subcutaneously. S. H. Large, Cleveland.

61. Rapid Convalescence After Mastoid Operations.—Bryant reports seven cases to show the results of treatment by blood clot for simple mastoid, drained blood clot for simple mastoid, the results of an infected mastoid wound after the use of a drained blood clot, the results in a mastoido-tympanic operation treated by blood clot, and one treated by the drained blood clot, and an infected case after mastoido-tympanic operation treated by blood clot. Five of the cases show rapid and satisfactory healing by first intention and two by second intention after infection and sloughing of the wound. The case of epidural abscess treated by the drained blood clot was followed by rapid and uneventful healing by first intention.

62. Id.—Langworthy says that at present the experiments in blood-clot operation teach us not so much the value of the blood clot in the mastoid as the fact that it is also unnecessary to leave a large wound gaping throughout its length to heal by granulations. Therefore, it is more practical to close the wound almost entirely and to cover as much bone as possible, leaving only sufficient space for drainage.

66. Cystic Polyp.—The interest of the case reported by Abraham lies mainly in the fact that the patient was operated on twice in five years for nasal polypi, the tumors being removed at both operations. One of the polyps had undergone cystic degeneration. The cyst was lined throughout by columnar ciliary epithelium.

Archives of Otology, New York.

February-April.

71 Case of Leptomeningitis with Complications. C. N. Spratt, Minneapolis.
72 Dionin in Chronic Catarrhal Deafness. B. A. Randall, Philadelphia.
73 Case of Mastoiditis Complicated by Thrombosis of Left Lateral Petrosal and Cavernous Sinuses. R. Lewis, Jr., New York.
74 Mastoiditis in Diabetics. J. D. Richards, New York.
75 Prognosis of Operative Procedures on Mastoid Process of Diabetics. E. L. Meierhof, New York.
76 Progressive Spongification of Labyrinthine Capsule (Otosclerosis). N. H. Pierce, Chicago.
77 Faulty Methods of Brain Localization in Intracranial Lesions, Complicating Aural Diseases. S. M. Smith, Philadelphia.

Archives of Ophthalmology, New York.

March.

78 Anatomic Changes in Ophthalmia Sympathetica. E. V. L. Brown, Chicago.
79 Neuritis of Intracranial Portion of Optic Nerve. H. Gradle, Chicago.
80 Bilateral Painless Dilatation of Frontal Sinuses Due to Death of Lining Mucous Membrane. J. Dunn, Richmond, Va.
81 Causation of Glaucoma by Intraocular Tumors. B. Pusey, Chicago.
82 Case of Glioma Retinæ. McC. Radcliffe and H. G. Goldberg, Philadelphia.

American Practitioner and News, Louisville.

April.

83 Heredity. G. B. Jenkins, Louisville.
84 Industrial Insurance. A. H. Falconer, Louisville.
85 Operation for Repair of Complete Laceration of the Perineum. C. E. Ristine, Knoxville, Tenn.
86 Certain Manageable Phases of Insanity. J. L. Pomeroy, New York City.

Medical Herald, St. Joseph, Mo.

April.

87 Nervousness: Its Significance and Treatment. J. Punton, Kansas City, Mo.
88 Scarlet Fever. J. K. Phipps, Grant City, Mo.
89 Sympathetic Ophthalmia. E. H. Cary, Dallas, Texas.
90 Appendicostomy. Internal Hernia. A. L. Blesh, Guthrie, Okla.

Virginia Medical Semi-Monthly, Richmond.

April 12.

91 Lavage of Renal Pelvis in Pyelitis and Kidney Conditions. L. W. Bremerman, New York.
92 Acute Frontal Sinusitis. C. M. Miller, Richmond, Va.
93 Therapeutic Suggestions. G. F. Butler, Chicago.
94 So-called Wild Hairs in the Eyes. O. B. Dunn, Ironton.
95 Placenta Prævia, with Report of Cases. J. B. Jones, Petersburg, Va.
96 Value of Roentgen Ray in Diagnosis. A. L. Gray, Richmond, Va.
97 Therapeutic and Food Value of Breast Milk. St. G. T. Grinnan, Richmond, Va.
98 Principles of Surgery. S. McGuire, Richmond.

Journal of the Medical Society of New Jersey, Orange.

April.

99 Neurasthenia, Some Types and Their Management. T. P. Prout, Summit, N. J.
100 Tetanus. A. S. Ross, Camden, N. J.
101 The Medical Man in Politics for the Public Good. L. M. Halsey, Williamstown, N. J.

Montreal Medical Journal.

April.

102 Modern Methods in Renal and Ureteral Surgery. G. E. Armstrong, Montreal.
103 Treatment of Rheumatism at Caledonia Springs. E. S. Harding, Montreal.
104 Cystopexy for Falling of the Bladder. A. L. Smith, Montreal.
105 Rupture of Subclavian Artery and Brachial Plexus by Direct Violence. J. Bell.
106 Puerperal Convulsions Due to Intracranial Pressure—Lumbar Puncture—Recovery. H. L. Reddy, Montreal.
107 Shock Simulating Cerebral Hemorrhage. J. A. Hutchinson, Montreal.

Yale Medical Journal, New Haven, Conn.

April.

108 Etiology of Dementia Paralytica. A. R. Diefendorf, New Haven.
109 Colon and Paratyphoid Infection. D. M. Lewis, New Haven.
110 Normal Body Temperature. V. C. Myers.
111 Immunity in Tuberculosis. D. R. Lyman, Wallingford, Conn.

Ophthalmic Record, Chicago.

April.

112 Case of Epithelioma of the Chorioid. J. E. Weeks, New York.
113 Acute Rise of Intraocular Tension Following Injection of Cyanid of Mercury. G. E. de Schweinitz, Philadelphia.
114 Hemorrhages within the Orbit. F. T. Tooke, Montreal.

115 Hysteria in which Accidental Trauma was Simulated by Placing Pieces of Glass in Conjunctival Sac. C. W. Heath, Chicago.
116 Coloboma of Lid with Anomalous Condition of Tissues at Outer Commissures. W. C. Posey, Philadelphia.
117 Ulceration of Cornea from Diplobacillus of Morax-Axenfeld. H. McKee, Montreal.
118 Case of Cyclitis with Radical Change in Refraction. C. R. Elwood, Menominee, Mich.
119 Case of Persistent Hyaloid Artery and Canal of Cloquet. F. Krauss, Philadelphia.
120 Progress of Retinitis of Presumable Rheumatic Origin. J. A. Patterson, Colorado Springs, Colo.
121 Staining from Argyrol, Employed in Diseases of Conjunctiva and Lachrymal Apparatus. H. Moulton, Fort Smith, Ark.
122 Case of Embolism of Cilioretinal Artery. F. Krauss, Philadelphia.

Southern California Practitioner, Los Angeles.
April.

123 The Opsonic Index: Its Possibilities and Limitations. J. E. Pottenger, Monrovia, Cal.
124 Medical vs. Surgical Treatment in Diseases of the Stomach. L. G. Visscher, Los Angeles.
125 Relation of Carcinoma to Ulcer of the Stomach. S. P. Black, Los Angeles.
126 Occult Blood in Stomach Contents and Feces: Its Value in Diagnosis and Treatment. B. Reed, Los Angeles.
127 Indications for Surgical Treatment of Diseases of the Stomach in Absence of Perforation or Hemorrhage. W. A. Edwards, Los Angeles.

Vermont Medical Monthly, Burlington.
April 15.

128 Etiology and Pathology of Nephritis. F. E. Clark, Burlington.
129 Nephritis. W. H. Lane, Brattleboro.
130 Nephritis—Complications and Sequelæ. J. H. Blodgett, Saxtons River, Vt.
131 Treatment of Chronic Nephritis. S. W. Hammond, Rutland.

Buffalo Medical Journal.
May.

132 Relation of Tuberculosis to Municipal and Industrial Life. C. Stover, Amsterdam, N. Y.
133 Epiphyseal Separation of the Ends of the Humerus. M. M. Lucid, Cortland, N. Y.
134 Diseases of Nasopharynx in Infancy. J. L. Morse, Boston.

Journal of the Kansas Medical Society, Lawrence.
April.

135 Operative Intervention in Eclampsia. G. C. Mosher, Kansas City.
136 Appendicitis During Pregnancy. E. F. Robinson, Kansas City.
137 Prevention of Epilepsy. M. L. Perry, Parsons, Kan.
138 Eye Lesions Important to the General Practitioner. J. G. Dorsey, Wichita.
139 Gonorrheal Eye Lesions. J. F. Gsell, Wichita.
140 Indications for Thoracentesis in Treatment of Pleurisy with Effusion. J. G. Sheldon, Rosedale.
141 Addison's Disease. S. B. Laugworthy, Leavenworth.

Wisconsin Medical Journal, Milwaukee.
March.

142 *Static Foot Disorder. H. E. Dearholt, Milwaukee.
143 *Medical Aspects of Exophthalmic Goiter. W. H. Washburn, Milwaukee.
144 *Surgical Treatment of Goiter. H. A. Sifton, Milwaukee.
145 Psoriasis. G. H. Lawrence, Galesville, Wis.

142, 143, 144.—See abstracts in THE JOURNAL, July 14, 1906, page 145.

FOREIGN.

Titles marked with an asterisk (*) are abstracted below. Clinical lectures, single case reports and trials of new drugs and artificial foods are omitted unless of exceptional general interest.

British Medical Journal, London.
May 18.

1 *Chronic Splenomegalic Polycythemia. R. Saundby.
2 *Case of Splenic Leukemia with Gout and Albuminuria. G. Parker.
3 Local Anesthesia by Novocain. J. W. Pare.
4 *Regeneration of Nerves with Regard to Treatment of Certain Paralyses. C. J. Bond.
5 *Morphinomania Successfully Treated with Atropin and Strychnin. M. S. P. Strangman.
6 *Physiologic Action of Whisky on the Circulation. F. J. Charteris and E. P. Cathcart.
7 *Calcium Salts in Pneumonia. J. D. Cree.
8 New Method of Isolating Bacillus Typhosus from Infected Water. W. J. Wilson.
9 *Structure and Secretion of Parathyroid Glands in Man. D. Forsyth.
10 Helmitol in Acute Cystitis in an Infant. J. A. Williams.
11 Case of Infanticide. O. H. Garland.

1. **Splenomegalic Polycythemia.**—Saundby believes that the toxins of influenza and many other infections are directly responsible for the occurrence of splenomegalic polycythemia. He believes the condition to be a cerebrospinal neurasthenia, causing vasomotor spasm, with engorgement of the capillary and venous circulation, and congestion of the internal organs, especially of the liver and spleen, with muscular weakness, loss of knee-jerks and mental impairment, shown by loss of memory, apathy and drowsiness. He reports two cases.

2. **Splenic Leukemia Complicated by Gout and Albuminuria.**—Parker's patient had first an attack of malaria and a year later one of gout. Several years afterward he applied for treatment, suffering with pyrexia, joint pains, marked anemia and breathlessness. The urine at that time showed a trace of albuminuria. Marked improvement in the blood and a very considerable diminution in the size of the spleen followed the use of the Roentgen ray.

4. **Regeneration of Nerves.**—Bond cites the case of a man who sustained a fracture dislocation of the lowest dorsal and first lumbar vertebræ, with crushing of the cord and complete paraplegia. Laminectomy was performed, and, finding the cord completely divided, Bond cut the last dorsal nerve roots intact above the crush, on the right side, as low down as possible, before their exit, through the theca, and also divided the first lumbar nerve roots found intact below the disorganized portion of cord, and turning these latter upward, he united the cut proximal ends to the cut proximal ends of the dorsal nerve roots previously divided. The patient died seven weeks after the operation. There had been no evidence of any recurrence of voluntary movement.

5. **Atropin and Strychnin for Morphin Habit.**—Strangman reports a case of morphinism of over 30 years' standing that was treated successfuly with atropin and strychnin. The patient latterly took two wineglassfuls of laudanum in the day. This was withdrawn completely when treatment was begun, and within two weeks the craving for opium had disappeared and the patient's condition was very much improved. Strangman began with 1/100 grain atropin sulphate and 1/60 grain strychnin nitrate, three times a day, increasing as rapidly as the patient could stand it, until on the eighth day he was given atropin sulphate 1/50 grain and strychnin nitrate 1/20.

6. **Physiologic Action of Whisky on Circulation.**—Charteris and Cathcart found that the action of whisky on the pulse and blood pressure depends on its alcoholic content and not on any special body distilled over.

7. **Calcium Salts in Pneumonia.**—Cree concludes that in the symptomatic treatment of pneumonia calcium is a valuable drug in the hemorrhagic type of cases, but not in the dry type, in which class of cases he thinks it is more rational to prescribe citrate of sodium or potassium. In the type of cases in which heart failure is feared, unless there is a special call for calcium, he considers that there are drugs of more value.

9. **Structure and Secretion of Parathyroid.**—Forsyth summarizes his views as follows: 1. The parathyroid gland, like other glands, presents the histologic variations of activity and rest. The so-called oxyphile cells are cells distended with granular secretion, and the so-called principal cells represent the exhausted stage. Intermediate forms are common. 2. The granular secretion of the cells is extruded into the surrounding lymphatic spaces and often the product of many cells runs together to form a drop. This may either lie in an irregular space between the cells or occupy a central position around which the cells are grouped to form a vesicle. In either case the secretion passes into the smaller lymphatic vessels and gradually flows along larger vessels to reach the surface, whence it drains away from the gland. 3. The secretion of the parathyroid, both in its physical characters and in its microchemical reactions, appears indistinguishable from the colloid of the thyroid. 4. During the first few months of life the parathyroid glands show few if any signs of activity. By the end of the third month at latest colloid secretion may be found, though the infantile type may persist for some years.

The Lancet, London.
May 18.

12 The Cancer Problem. J. Bland-Sutton.
13 Pelvic Appendicitis with Para-appendiceal Abscess and Cystitis. G. Barling.
14 Control of Supernormal Arterial Pressure. G. Oliver.
15 *Case of Chloroma. F. M. Pope and W. E. Reynolds.
16 Diseases of Upper Respiratory Passages in Relation to Life Assurance. W. H. Kelson.
17 Mucomembranous Colitis. J. Liddell.

18 Case of Confluent Hemorrhagic Eruption in Varicella. C. R. Porter.
19 Albuminous Bodies Present in Pathologic Effusions. W. C. Bosanquet.

15. **Chloroma.**—Pope and Reynolds report a case of chloroma in which they succeeded in demonstrating a bacillus, which markedly resembled the *Bacillus mallei*, both morphologically and in staining affinities. Its distribution is precisely that of the pigment and it is chiefly abundant in the nuclei of the cells immediately adjacent to the growth, in the nuclei of the cells forming the growth, and in the cytoplasm of the hepatic cells and of the endothelial cells in every organ; in these last the bacilli appear to be exceedingly numerous; in places the cells are plugged with them, in others two or three are contained within vacuoles; some are free in the blood and in the intercellular spaces of the growth. The bacillus is variable in size, usually of the size of a tubercle bacillus but somewhat thicker; some are larger, slightly curved and sometimes show clubbing of one or both extremities, and their protoplasm is often broken up into a number of deeper stained bands; others are smaller, of about the same thickness, and exhibit marked bipolar staining; they all possess rounded ends so as to give the shorter forms a spindle-shaped character. The authors were unable to detect any definite spore formation or to stain them by Gram's method. The bacillus is stained faintly and with difficulty by basic stains and is easily decolorized with weak acids and less so with alcohol. Cultivation was unsuccessful both from the blood taken during life and from the blood and organs postmortem. Inoculation with blood taken during life was unsuccessful.

Dublin Journal of Medical Science.
May.

20 Case of Maniacal Chorea. J. M. Finny.
21 Our Debt to Ireland in Study of Circulation. G. A. Gibson.
22 Detection of Organic Poisons in Animal Matter. M. Esposito.

Presse Médicale, Paris.

23 (XV, No. 26, pp. 209-216.) Dislocation of Patella and Radiography. (Luxations de la rotule.) L. Chevrier.
24 Hydrotherapy in Pneumonia. (Traitement hydrothérapique de la pneumonie.) F. Levy.
25 The "Critical Age" in Men. (L'âge critique chez l'homme.) V. de Mouillac and R. Romme.
26 (No. 27, pp. 217-224.) Cardiac and Pulmonary Reflexes. (Réflexes cardiaque et pulmonaire.) A. Abrams.
27 Presence of Lecithins in Hypernephromata. (Présence de lécithines dans les hypernéphromes.) G. Delamare and P. Lecène.
28 *Amputation with Retained Function. (Moteurs plastiques.) G. Vanghetti.
29 Respiratory Neuroses in Hysteria. (Névroses resp. Le hoquet.) I. Duscian.

28. **Amputation of Arm with Retained Approximate Function.**—THE JOURNAL summarized on page 180 Ceci's report of three cases in which an arm had been amputated above the elbow, but the functional use of the artificial hand approximated normal. This was due to its being fastened to loops formed of the stumps of tendons over which the patient still had volitional control. The illustrations of the article showed the patients holding a lamp at arm's length, wielding an ax or suspending heavy weights. The idea of this "cinematic prothesis" or "plastic orthopedic amputation" with loops of the tendon stumps was credited to Vanghetti, a physician of Florence, Italy. He here states that the best results are obtained when no attempt is made to complete the operation at one sitting, unless absolutely certain of asepsis. After the amputation the stumps of tendons and muscles are prepared for the later plastic operation. In order to prevent their retraction he sutures them temporarily against the bone or otherwise inside or outside of the stump, having observed that a muscle does not retract after it is severed if the stumps are sutured together again. He adds that it is not necessary to wait until the tendons have entirely healed before completing the operation to supply a living, functioning support for the artificial hand, pivoting in the hollow forearm prothesis. The tendons and muscles should not be isolated, but used with all their natural protections.

Revue de Chirurgie, Paris.
Last indexed, page 1891.

30 (XXVII, No. 2, pp. 161-328.) Technic of Exposure and Resection of Cervical Sympathetic. (Symp. cerv.) P. Sebileau and A. Schwartz.
31 Surgical Forms of Ileocecal Tuberculosis. (Ilèo-cec. tub.) H. Hartmann.
32 Autoplastic Intestino-parietal Suture for Certain Perforations of Large Intestine. (Mode spécial de suture, etc.) Soubeyran.
33 Subserous Appendectomy. (App. de Poncet.) L. Thévenot.
34 True Adenoma in Ectopic Testicle. (Adénome vrai dans le testicule ectopique.) P. Lecène and M. Chevassu.
35 Round Ligament in Femoral Hernia. (Lig. rond dans les hernies crurales.) L. Chevrier.
36 *Crushing Injuries of Leg. Amputation or Conservative Measures? (Ecrasements du membre inférieur.) L. Imbert.

36. **Crushing of Leg: Amputation or Not.**—Imbert's careful study of this subject concludes with the recommendation never to amputate in the first few hours after the accident. Hemorrhage and shock should first be controlled, and immediate amputation would only aggravate the shock. In one case on record the leg was hanging only by a flap of skin and the physician cut this without anesthesia. The patient died the second day, before signs of infection appeared. This was the effect of a railroad accident. The toilet of the injured leg should be made at once, with extreme care, removing all bone splinters and opening all recesses that have formed, under a constant flow of antiseptic fluids, and the limb should be placed in a wire splint, waiting for further developments. When the temperature begins to go up the question of amputation becomes pressing. In Imbert's twelve cases he was forced to amputate in eleven of them during the stage of infectious complications, which includes the first week or two after the accident. Three of the eleven patients died. If the temperature shows pyemic fluctuations, surgical intervention should be prompt, but decision is difficult when the secretion is not actual pus, but the temperature is high, letting up a little in the morning, the pulse rapid, the complexion livid, the tongue dry. In the three fatal cases the amputation was done during this stage, and he thinks it came too late. When the organism is impregnated with septic products, removal of the focus does not suppress them and amputation comes too late even if done as early as the fourth day. Fever alone is not an indication, but when it is accompanied by pallor, rapid wasting, persistently rapid pulse and, especially, by dryness of the tongue, he advises not to wait further. This date is usually the third or fourth day after the subsidence of shock. Thanks to antitetanic serum, there need be no fear of tetanus.

Berliner klinische Wochenschrift.

37 (XLIV, No. 14, pp. 385-416.) *False Epidemic Cerebrospinal Meningitis. (Men. cer.-spin. pseudoepidemica.) A. Baginsky.
38 *Advantages of Distilled Water as Beverage in Nephritis. (Wirkung des Trinkens von dest. Wasser bei einem Falle von chron. Nierenentzündung.) Marcus.
39 *Outfit for Quantitative Tests of Sense of Taste. (Gustometer zur klin. Zwecken.) W. Sternberg.
40 Improved Technic for Determination of Pale Spirochetes in Smear Cultures with the Silver Method. (Spir. pall. im Ausstrich.) M. Stern.
41 *Abnormally High Blood Pressure not a Contraindication to Carbonated Baths. (Uebernormaler Blutdruck und kohlensäurehaltige Solthermen.) Baur.
42 Historical Sketch of Mineral Waters in Therapeutics. (Badewesen.) A. Martin.

37. **False Epidemic Cerebrospinal Meningitis.**—Baginsky describes several cases which apparently presented the typical syndrome of epidemic cerebrospinal meningitis, but terminated favorably and the specific meningococcus could not be discovered.

38. **Advantages of Distilled Water in Nephritis.**—Marcus tabulates the findings in regard to the metabolism in a patient with chronic nephritis during periods in which she drank ordinary water and others in which distilled water only was taken. During the ten days during which the patient, a woman of 35, drank only distilled water—a total of twelve liters—the output of urine was twice the amount voided during the corresponding periods with ordinary or mineral water. The specific gravity of the urine dropped to nearly one-half. The total amount of albumin eliminated increased a trifle during the ten days, while the blood became more condensed. The increased diuresis was not accompanied by an increase in the amount of solid constituents in the urine, but rather the reverse. This speaks against von Noorden's conception of the "flushing out" of the system under copious diuresis.

39. **Tests for Sense of Taste.**—Sternberg's little case contains jars with ether, chloroform and acetic acid, and a device

for applying them to test the sense of taste. He thinks that the close relations between the behavior of the stomach and tongue suggest the therapeutic application of measures to influence the former through the latter, especially in combating loss of appetite. He believes that the stomach specialist, the neurologist and the rhinologist might profit by "gustometry."

41. **Carbonated Baths in Treatment of Abnormally High Blood Pressure.**—Baur's experience at Nauheim has been that fully 75 per cent. of such patients were benefited by the carbonated thermal baths.

Deutsches Archiv f. klinische Medizin, Leipsic.
Last indexed, page 1552.

43 (XC. Nos. 1-2, pp. 1-210.) *Experimental Studies of Toxic Nephritis. (Tox. Nephritis.) Schlayer and Hedinger.
44 *Nature and Treatment of Chlorosis. (Wesen der Chlor.) O. Wandel.
45 *Perpetual Arrythmia. (Arythmia perpetua.) J. Theopold.
46 *Experimental Study of Dropsy in Kidney Affections. (Hydrops bei Nierenkrankheiten.) A. Heineke and W. Meyerstein.
47 *Pernicious Anemia. (Aplastische Anämie.) R. Blumenthal.
48 *Diagnosis of Perforation into Bronchi of Bronchial Glands Softened by Anthracotic Process. (Perf. Bronchialdrüsen.) A. Schmidt.
49 Study of Percussion Resonance. (Perkussionschall.) T. Selling.
50 Experimental Study of Relations Between the Filling of, and Pressure in the Aorta. (Füllung und Druck in der Aorta.) T. Fürst and F. Soetbeer.

43. **Study of Toxic Nephritis.**—The researches reported demonstrate that acute toxic nephritis may be vascular or tubular, and that functional tests are able to differentiate the disturbances from these causes. Serious injury of the vessels manifests itself in reduced diuresis and negative response to the phloridzin test. Acute vascular nephritis is accompanied by low blood pressure.

44. **Nature and Treatment of Chlorosis.**—Wandel's extensive study of this subject leads him to announce that a combination of electric light baths, to induce sweating, followed by cold douches and other measures to promote a reaction, have no influence on chlorosis when used alone. When combined with iron they are of powerful assistance in promoting the assimilation of the iron and its transformation into hemoglobin. He ascribes the chlorosis to defective synthesis of hemoglobin, and the combination of physical measures with the intake of iron stimulates the cells whose insufficiency is revealed in the inability to construct the hemoglobin molecule.

45. **Perpetual Arrhythmia.**—Theopold discusses the three forms of irregular pulse: That due to infantile conditions, that due to extrasystoles, and the so-called perpetual arrhythmia. He gives the tracings and clinical history of a number of cases in the latter category. They show that the perpetual arrhythmia is generally associated with systolic venous pulse. This systolic venous pulse is not always dependent on tricuspid insufficiency. In the majority of cases it is the result of primary arrest of the auricle. Mixed forms occur still more frequently, as in case of arrest of the auricle the valves probably do not close so promptly as in the case of an active auricle. The arrest of the auricle is not always associated with failing compensation, and it may or may not be accompanied by dilatation. In one of the cases related, with pronounced tricuspid insufficiency and arrest of the auricle, the irregularity in the pulse disappeared entirely under digitalis, while the ventricular venous pulse was not influenced by the drug. The venous pulse picture does not change with the degree of failing compensation and dilatation so long as the pulse remains regular. In the milder cases the conditions resemble a form of infantile arrhythmia independent of the respiration. In the severer cases the picture is complicated by frequent intercurrent extrasystoles. In the favorable cases digitalis abolishes the small systoles and the arrhythmia assumes the infantile type. It seems as if the sudden influx of blood at the beginning of the diastole favors the development of extrasystoles. Various cases of perpetual arrhythmia differ in many respects.

46. **Experimental Study of Edema in Kidney Affections.**—Among the conclusions of the research described is one to the effect that rabbits with experimental nephritis had edema twice as frequently and twice as severely when they were fed much salt. The influence of the salt in inducing dropsy was unmistakable in the experimental nephritis of various origins. The proportion of salt in the urine may be less than that in the blood, even when the urine is scanty and there is an excessive proportion of salt in the blood. The epithelium of the convoluted tubules is always found much degenerated in such cases, suggesting that the salt is eliminated by this epithelium. This assumption is confirmed by the clinically established fact of the close connection between the lesser proportion of salt in the urine and affections of the epithelial apparatus of the kidneys.

47. **Case of Pernicious Anemia.**—Blumenthal's patient was a woman of 42 with a tendency to rather excessive menstrual hemorrhage. Symptoms of pernicious anemia developed: Hemoglobin, 25 per cent.; reds, 740,000; whites, 3,600, with relative lymphocytosis. Among the symptoms were hemorrhages suggesting purpura and progressive dyspnea, with a fatal outcome in six weeks. The hemoglobin percentage was very low and the erythrocyte-producing function seemed to be entirely suspended, although there were no marked signs of degeneration of the corpuscles. The myeloid tissue in the bone marrow had been almost completely supplanted by lymphoid tissue. The blood picture during life was an accurate reflection of the arrested activity of the bone marrow. The prognosis in such conditions is not inevitably bad. By improving the nourishment of the bone marrow it might prove possible to restore the chemical environment which it requires for normal blood production, and the aplasia would then be arrested.

48. **Perforation of Bronchial Glands Softened by Anthracosis.**—Schmidt says that this occurrence is by no means rare at Dresden, where he practices. It is generally associated with anthracosis and tuberculosis of the lungs. The consequences of the perforation of the coal dust into the bronchial passages are very serious. Sometimes aspiration pneumonia results, with ultimate gangrene, but occasionally the perforation heals and a resulting putrid bronchitis may retrogress. The patients are generally advanced in years and the putrid bronchitis or pneumonia which may develop in an acute or subchronic form is generally unilateral and restricted to a single lobe. If the perforation is into the trachea the resulting process in the lung may be bilateral. Sometimes circumscribed, spontaneous pain is felt, especially during swallowing, or tenderness in the region of the manubrium. Circumscribed dulness or a shadow in the radioscopic picture may develop at the point. The sputa may contain black masses which the microscope shows to be detritus with particles of coal pigment. If associated with a traction diverticulum, the patient should be fed through a sound for a long time. In case of unilateral putrid bronchitis, artificial pneumothorax or hydrothorax might be found useful.

Deutsche medizinische Wochenschrift, Berlin and Leipsic.

51 (XXXIII, No. 17, pp. 665-704.) Reflex Symptoms Under Influence of the Mind. (Psycho-reflektorische Krankheitssymptome.) Goldscheider.
52 *Sphygmobolometer for Testing and Recording Force of Pulse. (Neue Untersuchungsmethode der Zirkulation.) H. Sahli. Commenced in No. 16.
53 *Two-minute Stain for Pale Spirochete. (Färbung in Aussstrichpräparaten.) G. Giemsa.
54 *Treatment of Ischemic Muscle Contraction and Pseudarthrosis. (Ischämische Muskelkontrakturen, etc.) P. Kleinschmidt.
55 Mountain Hay-Fever Resorts. (Alpine Heufieberstationen.) R. Baerwald.
56 *Differentiating Test for Tuberculous Pus. (Einfaches Hilfsmittel zur Unterscheidung tub., etc.) H. Kolaczek and E. Müller.
57 Progress in Organization of Army Medical Corps. (Entwicklung des Pr. Sanitätsoffizierkorps.) Werner.

52. **Sphygmobolometer for Testing Force of Pulse.**—Sahli gives an illustrated description of a new means of investigating conditions in the circulatory apparatus. A broad inflatable Riva-Rocci cuff is applied to the upper arm, with constricting band below. A float on the surface of the mercury in the connected manometer rises and falls with the pulse. To the float is fastened a cord passing over a pulley above; the outer end of the cord is connected with a recording index which traces the excursions of the float as it rises and sinks with the pulse wave. The entire pulse wave is registered, the force corre-

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spondingly greater than when examined at the wrist below. The registering apparatus works by pneumatic action, and the pulse tracings can be compared and the force of the pulse computed by a simple formula.

53. **Two-Minute Stain for the Pale Spirochete.**—Giemsa has modified the technic so that it is now possible to show up the pale spirochete in the serous fluid from a syphilitic lesion in less than three minutes. The fluid is smeared in an even, very thin layer on an object glass. No fixation is necessary unless the material is very fresh when it should be passed three times through a gas flame or alcohol flame. It is then stained with a fresh preparation of the Giemsa stain (10 drops in 10 c.c. of distilled water). The fluid is poured over the material and the object glass is held 5 cm. above a flame until it just begins to steam. It is then removed for fifteen seconds. The stain is then poured off and fresh stain is poured over the moist preparation, which is heated again and again removed from the flame for fifteen seconds. This procedure is repeated four times, leaving the stain in contact with the preparation for a whole minute the last time. It is then rinsed, when it is ready to examine. He adds a number of minor points which enhance the effects, among them the necessity for preparing the stain only just before it is to be used, and refraining from shaking and from the slightest admixture of any acid in the water or clinging to the dishes used. He gives a view of a preparation stained with this technic in two minutes.

54. **Treatment of Ischemic Muscle Contraction and Pseudarthrosis.**—Kleinschmidt's patient was a child of 7 and the contraction was the result of a fracture of the humerus above the condyle, treated by immobilization in a plaster cast. After its removal the forearm was found paralyzed and the hand and fingers were permanently contracted. After failure of months of massage, etc., he performed a Henle operation, resecting 3 cm. of both radius and ulna and using the excised bone to make two small rods to fit into the marrow cavities and thus hold the bones together. Healing proceeded very slowly, and a pseudarthrosis developed. To remedy this the cicatricial tissue that surrounded the stretch of bone was removed, and a flap of periosteum was taken from the tibia and wrapped around the stumps of the bone in contact where they were bare of periosteum. Healing then proceeded rapidly and the lad has almost normal use of his hand, although the arm is 3 cm. shorter than its mate. A year has passed since the final operation, with no signs of recurrence of the paralysis.

56. **Differentiation of Tuberculous from Other Pus.**—Kolaczek and Müller announce a simple means of rapid differentiation of pus, which will be found universally practicable. It is based on the different chemical reactions of Millon's solution to pus of various origins. A very small, moderately deep china dish is filled to the edge with Millon's reagent and a drop of the pus is deposited in the center of the surface. A solid film forms over the surface of the solution under the influence of tuberculous pus and the color of the fluid below is not altered. With pus of other origin no film forms and the fluid turns a bright red. Pus from an untreated tuberculous process does not induce the biuret reaction, but if the lesion has been treated with iodoform there is a marked positive reaction. Iodoform has evidently an unmistakable action in promoting autolytic processes in tuberculous lesions. The proteolytic enzymes thus liberated loosen up the contents of the abscess and enable them more readily to be absorbed. [Millon's reagent is a solution of 10 gm. (150 gr.) of mercury, and 20 c.c. (5½ drams) of nitric acid, diluted with an equal volume of water and decanted after standing twenty-four hours. This reagent gives a red color with proteids and most nitrogenous compounds in solution.]

Jahrbuch für Kinderheilkunde, Berlin.

Last indexed, page 1643.

58 (LXV, No. 4, pp. 393-518.) *Cirrhosis of Liver in Children After Scarlet Fever. (Lebercirrhose im Kindesalter.) A. Bingel.
59 *Dyspnea in Infants. (Dyspnoe beim Säugling.) F. Philips.
60 Skiagraphic Study of Ossification of Child's Hand. (Ossifikation der kindlichen Hand.) A. Helmann and K. Potpeschnigg.
61 Fifteen Years' Experience with Intubation. (15 Jahre Intubation.) P. Reich. Concluded.
62 *Treatment of Congenital Stenosis of the Pylorus. (Angeborene Pylorus-Stenose.) C. E. Bloch. Concluded.

58. **Cirrhosis of Liver After Scarlet Fever.**—Bingel describes the postmortem findings in eight cases of children who had died of scarlet fever. They suggested unmistakable degeneration of the liver from scarlatinal infection, with evident efforts on the part of the organism to repair the damage. He found similar conditions in two other cadavers in which the cause of death was some other infection. Possibly the pains noted in some instances in the right side were the manifestation of the degenerative process in the liver.

59. **Study of Dyspnea in Infants.**—Philips gives a number of tracings to illustrate the various types of respiratory disturbances observed in infants.

62. **Treatment of Congenital Stenosis of the Pylorus.**—Bloch has encountered twelve cases of congenital stenosis of the pylorus in infants, and relates his experiences with them. The first six infants were treated with gastroenterostomy and four died. The last six were treated according to Heubner's principles, that is, feeding with abundance of nourishing food, so that the amount which passes the pylorus may be exceptionally nourishing. Sedatives and cataplasms are given to control the assumed spasmodic contraction. He has never witnessed any benefit from lavage of the stomach. He insists on breast feeding for such children. In case breast milk is not attainable Bloch advises buttermilk, as it does not ferment in the stomach even when it is long retained, and does not seem to irritate the stomach like cow's milk under the same conditions. In the fatal cases the walls of the pylorus were always found abnormally thick and the walls of the stomach also showed a tendency to hypertrophy. The pylorus was always closely contracted, but the evidence tends to show that when this spasmodic contraction is overcome the normal lumen of the pylorus is permanently restored. The little patients once cured remain cured. He thinks the trouble is a persistence of fetal conditions which in time spontaneously subside. The abdomen is soft and sunken, but the stomach protrudes.

Monatsschrift f. Geb. u. Gynäkologie, Berlin.

Last indexed, page 1554.

63 (XXV, No. 4, pp. 434-570.) *Attempt to Predetermine Sex by Feeding Rabbits with Ovary Substance. (Filtterung mit Ov. Substanz. Geschlechtsbildung.) H. Peham.
64 *Hemorrhages at Puberty. (Blutungen am Beg. der Pubertät.) J. Fischer.
65 *Infrapubic Drainage of Bladder. (Infrasymphysäre Blasendrainage.) M. Sperling.
66 Experiences with Pubiotomy; 12 Cases. (Pubiotomie.) P. Baumm.
67 *High Application of Forceps. (Hohe Zange.) C. Riemann.
68 *Prophylaxis of Puerperal Fever. (Wochenbettfieber.) A. Dünges.
69 *Abortion and Sepsis Induced by Intrauterine Pessary. (Intrauterinpessar und sept. Abort.) G. W. Wagner.

63. **Experimental Study of Means to Predetermine Sex.**—Peham writes from Chrobak's clinic to relate the negative results of a long series of experiments during which rabbits were fed daily for two years with tablets of ovarian substance from animals of the same species.

64. **Hemorrhages at Onset of Puberty.**—Fischer recently had two cases of this kind; in the first the hemorrhages were referable to hemophilia and in the other to purpura hemorrhagica. In the first case, a girl of 12, uterine hemorrhage kept recurring notwithstanding the most energetic measures, but stopped at last after the uterus was curetted. The second patient, a girl of 14, had almost continual uterine hemorrhage which finally ceased after curettement. The child succumbed not long after to a profuse epistaxis. There were no symptoms on the part of the joints in the case of hemophilia, and the coagulating properties of the blood were rather above the average. Fischer reviews the cases on record of fatal hemophilic menstrual hemorrhage, and adds twelve cases from his gynecologic service in which excessive hemorrhage accompanied the first menstruation. The genital and general findings were normal in these cases; in three instances the tendency seemed to be inherited, with possibly a predisposition to fibroma formation. In every case there was obstinate constipation, which might possibly act as an adjuvant factor in maintaining hyper-

emia in the pelvis. In two cases the children were addicted to masturbation.

65. **Infrapubic Drainage of Bladder.**—Sperling comments on the benefit of drainage through the symphysis to hasten the healing of a vesicovaginal fistula by diverting the flow of urine. He reviews the technic, advocating the use of a curved trocar with a bulge near the tip to keep it from slipping out after it has been introduced into the bladder. He fills the bladder with from 250 c.c. to 300 c.c. (8½ oz. to 10 oz.) of fluid, and introduces the trocar between the urethra and clitoris, the convexity turned toward the symphysis. The hole made by the trocar closes at once as it is withdrawn and no urine oozes through afterward. Every vesicovaginal fistula thus treated to date has promptly healed. In Sperling's own experience he was able to remove the trocar in from twelve to fourteen days.

67. **Results of High Application of Forceps.**—Riemann gives the particulars of the use of the "high forceps" at Baumm's maternity in 100 cases. There was no mortality among the women, but 16 per cent. had a febrile puerperium and in 7 per cent. there was serious injury of some kind, while of the children 22 per cent. were born dead and 10 per cent. presented serious injury. The best results were obtained when the indications were on behalf of the mother. In such cases viable children could be delivered even with a conjugate diameter of only 8 cm. or less than 9 cm. Good results were also obtained with multiparæ with conjugate diameter of 9 cm. to 10.5 cm., but the results were less favorable as the pelvis decreased in size.

68. **Prophylaxis of Puerperal Fever.**—Dünges suggests that it might be possible to avoid carrying germs from the vagina into the uterus in intrauterine manipulations by greasing the hand in sterile soft fat or thick oil. This would prevent escape of germs in the hand and as the grease would be rubbed off as the hand entered the vagina, germs caught on the grease would be retained with it. Another suggestion is to wrap the hand in a greased square of gauze, held by the finger tips in such a way that when the hand is ready to enter the uterus, by letting go of the gauze the square could be drawn out of the vagina by the other hand. It might be possible, he adds, to have rubber gloves made in this way or like a mitten open at the top, that could be slipped back toward the wrist as the hand entered the uterus.

69. **Septic Abortion from an Intrauterine Pessary.**—Wagner writes from Chrobak's clinic at Vienna to comment on the danger of general sepsis from the use of intrauterine pessaries, sounds, etc., by the laity. In the case described, the pessary, with a broad obturator base, was used by a multipara to prevent conception—which it failed to do. It was considerably shorter than the uterus, and yet the tip had evidently, under pressure, produced an erosion in the opposite wall of the uterus, with resulting fatal sepsis. He learns that such pessaries can be bought in the department stores.

Books Received

Acknowledgment of all books received will be made in this column and this will be deemed by us a full equivalent to those sending them. A selection from these volumes will be made for review, as dictated by their merits, or in the interest of our readers.

MORRIS' HUMAN ANATOMY. A Complete Systematic Treatise by English and American Authors. Edited by Henry Morris, M.A., etc., President of the Royal College of Surgeons of England, and J. P. McMurrich, A.M., Ph.D., Professor of Anatomy, University of Michigan. Illustrated, Partly in Colors. Fourth Edition, Revised and Enlarged. Part I. General Morphogeny, Osteology, Articulations. Cloth. Price, $1.50 net. Part II. The Musculature, Organs of Circulation. The Lymphatics. Price, $2.00 net. Philadelphia: P. Blakiston's Son & Co., 1907.

INFECTIOUS AND PARASITIC DISEASES, Their Cause and Manner of Transmission. By Millard Langfeld, A.B., M.B. (Johns Hopkins); Professor of Bacteriology and Clinical Medicine, Creighton Medical College, Omaha. With an Introduction by L. F. Barker, Professor of Medicine, Johns Hopkins University. Illustrated. Cloth. Pp. 260. Price, $1.25 net. Philadelphia: P. Blakiston's Son & Co., 1907.

CARE OF THE BABY. A Manual for Mothers and Nurses, Containing Practical Directions for the Management of Infancy and Childhood in Health and Disease. By J. P. Crozer Griffith, M.D., Clinical Professor of Diseases of Children in the University of Pennsylvania. Fourth Edition, Thoroughly Revised. Cloth. Pp. 455. Price, $1.50 net. Philadelphia: W. B. Saunders Co., 1907.

FOODS AND THEIR ADULTERATION. Origin, Manufacture and Composition of Food Products; Description of Common Adulterations, Food Standards and National Food Laws and Regulations. By Harvey W. Wiley, M.D., Ph.D. Illustrated. Cloth. Pp. 625. Price, $4.00 net. Philadelphia: P. Blakiston's Sons & Co., 1907.

MANUAL OF PERSONAL HYGIENE. Proper Living on a Physiologic Basis. By American Authors. Edited by Walter L. Pyle, A.M., M.D., Fellow of the American Academy of Medicine, etc. Third Edition, Revised and Enlarged. Cloth. Pp. 451. Price, $1.50 net. Philadelphia: W. B. Saunders Co., 1907.

SECOND REPORT OF THE WELLCOME RESEARCH LABORATORIES at the Gordon Memorial College, Khartoum, Africa. Andrew Balfour, M.D., B.Sc., etc., Medical Officer of Health, Khartoum, Director. Cloth. Pp. 254. Department of Education, Sudan Government: Khartoum, 1906.

MANUAL OF OPERATIVE SURGERY. By John Fairbairn Binnie, A.M., C.M. (Aberdeen), Professor of Surgery, Kansas state University. Flexible Leather. Pp. 743. Price, $3.00. Philadelphia: P. Blakiston's Son & Co., 1907.

THE EFFICIENT LIFE. By Luther H. Gulick, M.D., Director of Physical Training in the New York City Schools. With Double-page Frontispiece. Cloth. Pp. 195. Price, $1.20 net. New York: Doubleday Page & Co., 1907.

STORIES OF A COUNTRY DOCTOR. By Willis P. King, M.D., Author of "Perjury for Pay." Revised and Enlarged Edition. Illustrated. Cloth. Pp. 410. Price, $1.50. Kansas City, Mo.: The Burton Co., 1906.

SECOND ANNUAL REPORT of the Jewish Consumptives' Relief Society at Denver, Colo. For the Year Ending Dec. 31, 1905. Paper. Pp. 64. Denver, 1906.

NEW PATENTS.

Recent patents of interest to physicians, etc.:

850994. Artificial leg. Ferdinand Buchstein, Minneapolis, Minn.
851510. Massage apparatus. George W. Fitz, Boston, Mass., and F. W. Hitchings, Cleveland, Ohio.
851530. Vaginal douche. Edward J. Lamport, Cape Town, Cape Colony.
851306. Ointment. Jeannette W. Nesmith, Gilpin County, Colo.
851562. Spraying nozzle. Joseph H. Kuff, Hollywood, Cal.
850978. Nose-shaper. Ignatius N. Soares, Framingham, Mass.
851265. Atomizer. Jacob Waldman, New York, N. Y.
851048. Nostril-expander. Henry R. Woodward, New York, N. Y.
852154. Syringe. Martin Bariffi, New York, N. Y.
852163. Massage implement. Leonard B. Buchanan, Woburn, Mass.
852110. Vaginal syringe. Daniel O. Fosgate, Chicago, Ill.
851758. Spraying device. Ell F. Kauffman, York, Pa.
852065. Syringe. Benjamin F. Keller, Camden, Ohio.
851941. Surgical instrument. John E. Kennedy, New York, N. Y.
852122. Air-purifying apparatus. John H. Kinealy, Ferguson, Mo.
851950. Ankle supporter. Raoul F. Le Mat, Washington, D. C.
852280. Device for handling invalids. Wallace N. Mason, Richburg, N. Y.
852133. Electrotherapeutical instrument. James W. Moliere, Oakland, Cal.
853165. Apparatus for generating and administering gases for general anesthesia. Clarence R. Cummins, Erie, Pa.
852827. Eye massage apparatus and medicator combined. Frank C. Dorment, Detroit, Mich.
852828. Atomizer. Frank C. Dorment and G. C. McVoy, Detroit, Mich.
852423. Air-purifying device. Charles E. and R. Dressler, New York, N. Y.
852549. Massage apparatus. Daniel C. Fisher, Boston, Mass.
852096. Depilatory instrument. Henry H. Ives, Louisville, Ky.
852901. Sanitary automatic cuspidor. Arthur Porter, Galena, Ill.
12648. Aseptic drinking-cup, Re-issue. John J. Shea, Beverly, Mass.
852807. Mounting anatomical specimens. Oakley G. Smith, Iowa City, Iowa.
852915. Treating casein and compound obtained therefrom. Julius Taluau, Philadelphia, Pa.
853431. Inhaler. Albert B. Allen, Chicago, Ill.
853434. Automatic disinfecting or odorizing apparatus. Henry S. Blackmore, Mount Vernon, N. Y.
853435. Automatic apparatus for sterilizing, disinfecting, and odorizing vehicles. Henry S. Blackmore, Mount Vernon, N. Y.
853913. Apparatus for disinfecting, odorizing, or other purposes. Henry S. Blackmore, Mount Vernon, N. Y.
853498. Sterilizer. Wilmot Castle, Rochester, N. Y.
853439. Inhaler. Albert C. Clark, Chicago, Ill.
853626. Inhaler. Charles H. Coles, Sandwich, Ill.
853402. Regenerating and purifying air. Richard von Foregger, New York, N. Y., and G. F. Brindley, Niagara Falls, Ont., Canada.
853410. Surgical appliance. Ernest D. Huebner, Milwaukee, Wis.
853887. Poison bottle. David and H. G. La Tremouille, Oswego, N. Y.
853559. Desiccating air. Proper A. Maignen and T. I. Crane, Philadelphia, Pa.
853708. Catamenial sack. Frank X. Mathis, Jr., and L. Simon, Philadelphia, Pa.
853645. Vibratory apparatus for ear treatment. Eugene Meyer, New York, N. Y.
853944. Solidified diastatic malt extract. Isidor Poliak, Vienna, Austria-Hungary.
853265. Preventing oxidation of formaldehyde and product thereof. Ludwig H. Reuter, New York, N. Y.
853829. Therapeutic and other electric lamps. Charles M. Robinson, New York, N. Y.
853659. Pasteurizing apparatus. Frank Tyson, Canton, Ohio.
853528. Prescription cabinet. Edward F. Wallace, Burgess, Miss.